



1. In use-case diagram, what is system illustrated by?

1. oval
2. box
3. circle
4. triangle

Correct Answer : 2

2. UML supports _____ phases of software development

1. earlier
2. final
3. middle
4. all

Correct Answer : 4

3. Which Agile principle can help in chronic situation?

- A. Incremental Delivery
- B. Continuous Integration
- C. PMO Policy
- D. Latest Technology

4. requirement analysis _____

1. delivers a system in a series of versions
2. organizes abstraction
3. builds a bridge between user and developer
4. uses experimental software to better understand user requirements

Correct Answer : 3

5. What is type of software maintainance?

1. adaptive
2. corrective
3. perfective
4. obsolescene

Correct Answer : 4

6. which of the following activities of SDLC involves choosing a system structure capable of satisfying requirement specification?

1. requirement analysis
2. design
3. coding
4. testing

Correct Answer : 2

7. pick up the odd one out of the following

- A. data flow diagram
- B. object identification
- C. structural decomposition
- D. E-R diagrams

Correct Answer : 2

8. . ----- Lifecycle model describe how software system should be developed and describe how software are actually developed.

1. Prescriptive & Descriptive



2. Prescriptive & Definitive
3. Descriptive & Prescriptive
4. Descriptive & Intuitive

Correct Answer : 1

9. The requirement phase consist of

- a) Problem analysis b) Requirement specification
c) Requirement validation d) Problem validation

1. a, b, c
2. a, b, c, d
3. a, b, d
4. a, c, d

Correct Answer : 2

10. _____ is a method for estimating the software

1. COCOMO
2. Function Point Analysis
3. Use Case Estimation
4. All of the above

Correct Answer : 4

11. The elements of the software architecture of a computing system include

1. software components
 2. class diagrams
 3. connectors expressing relationships between software components
 4. entity relationship diagrams
1. 1 & 2
 2. 1 & 3
 3. 1, 3 & 4
 4. 1, 2, 3 & 4

Correct Answer : 2

12. Ability of a software to perform intended function with minimum consumption of computing resources

1. Efficiency
2. Robustness
3. Reliability
4. Correctness

Correct Answer : 1

13. Ability to deal with exceptional conditions e.g. invalid input, improper handling, power failure, disk crash etc.

1. Efficiency
2. Robustness
3. Reliability
4. Correctness

Correct Answer : 2

14. Maintainability is the ease with which a software can

1. be corrected if an error is encountered



2. adapted if its environment changes
3. enhanced if the customer desires a change in requirements
4. all of above

Correct Answer : 4

15. The type of testing carried out along with coding is called

1. system testing
2. unit testing
3. pretesting
4. stress testing

Correct Answer : 2

16. The type of software maintenance which is done to remove bugs or defects in the software is called

1. Corrective Maintenance
2. Adaptive Maintenance
3. Regressive Maintenance
4. Perfective Maintenance

Correct Answer : 1

17. RAD stands for

1. Rapid Application Development
2. Random Access Disc
3. Random Application Driver
4. Rapid Alignment Disc

Correct Answer : 1

18. Which of the following is not true about Component Assembly Model

1. It is similar to the Spiral Model
2. The technical framework for this model is provided by object technologies
3. Candidate classes are extracted from class library or developed
4. Its productivity is low

Correct Answer : 4

19. Which of the following is not true about the context diagram?

1. It does not show details of the functioning
2. It shows major inputs & outputs of the system
3. It shows the external entities of the system
4. It shows the datastores of the system

Correct Answer : 4

20. . Data Items in a data dictionary are description of

1. Input data
2. data flows
3. data stores
4. All of the above

Correct Answer : 4

21. The ways of describing specifications at different levels of detail include

1. requirements definition



2. requirements specification
3. both a and b options
4. None of these options

Correct Answer : 3

22. Stable requirements are

1. Requirements related to the core activities of software customer
2. Requirements which are dependent on the environment where the delivered system is to be used
3. both a and b options
4. none of these options

Correct Answer : 1

23. Functional Independence is not achieved by

1. Coupling
2. Modularity
3. Information Hiding
4. Any of the above

Correct Answer : 1

24. If two modules are coupled without exchange of data or control information then they exhibit

1. Normal Coupling
2. Stamp Coupling
3. Control Coupling
4. Common Coupling

Correct Answer : 1

25. Which of the following is a graphical tool for software design?

1. Data Flow Diagram
2. Structure Chart
3. Decision Tree
4. all of the above

Correct Answer : 4

26. What manifests in the patterns of choices made among alternatives ways of expressing an algorithm is

1. a data flow diagram
2. coding style
3. a data dictionary
4. None of these options

Correct Answer : 2

27. Changes made to the software to correct defects uncovered after delivery is called

1. perfective maintainence
2. regressive maintainence
3. adaptive maintainence
4. corrective maintainence

Correct Answer : 4

28. Arrang the following in the correct sequence of software estimation a. Schedule Estimation b. Effort Estimation c. Cost Estimation d. Size estimation

1. b, c, a, d
2. c, a, b, d



3. d, b, a, c

4. a, c, d, b

Correct Answer : 3

29. Final Function point count calculated for project will result in the smallest LOC if implemented in

1. Assembly

2. C

3. C++

4. Visual Basic

Correct Answer : 4

30. Project schedule can be illustrated using

1. DFD and ERD

2. Bar chart

3. Activity chart

4. Both b and c options

Correct Answer : 4

31. Most of the project plans should include

1. Risk analysis

2. Project organization

3. Project schedule

4. All of the above

Correct Answer : 4

32. _____ shows the dependencies between the different activities making up a project.

1. PERT chart

2. Bar chart

3. Staffing Plan

4. Pi chart

Correct Answer : 1

33. Chief Programmer Teams are suitable for projects

1. with research orientation

2. with high modularity

3. with high creativity

4. None of these

Correct Answer : 2

34. Judging the seriousness of a risk by evaluating its probability along with its consequences is called

1. Risk analysis

2. Risk Projection

3. Risk Estimation

4. all of the above

Correct Answer : 4

35. The RMMM plan is generally included in the

1. Feasibility Study

2. Project Plan

3. SRS Document

4. Project Legacy

Correct Answer : 2



36. InvalidateRect() puts WM_PAINT message in message queue.

- 1.**true**
- 2.false
- 3.Not Always

37. UpdateWindow() paints the client area.

- 1.**True**
- 2.False
- 3.Not Always

38. HINSTANCE type variable stores id of running application

- 1. **True**
- 2 False
- 3 Not Always

39. WM_TIMER is the highest priority message

- 1.true
- 2.false
- 3.not always

40. The WM_INITDIALOG message is sent to the dialog box procedure immediately before a dialog box is displayed.

- 1.**true**
- 2.false
- 3.not always

41. SendMessage is not directly send to the window procedure.

- 1.true
- 2.**false**
- 3.not always

42. Icon is a Text resource.

- 1.true
- 2.**false**
- 3.not always

43. Subclassing means changing the behaviour of controls.

- A. **true**
- B. false
- C. not always

44. CALLBACK functions are called by the operating systems.

- a) **true**
- b) false
- c) not always

45. WINAPI is not related to calling conventions.

- true
- false**
- not always



46. Which of the following operations is provided by a common dialog box?

Choosing an icon

Choosing a network drive.

Choosing a database.

Choosing a font.

47. What is the primary difference between SendMessage and PostMessage?

SendMessage is used for local queues, while PostMessage is used for remote queues.

SendMessage can only be used within a worker thread, while PostMessage can be used at any time.

SendMessage can only send messages to the application thread, while PostMessage can send messages to any thread.

SendMessage is called from within a Windows procedure, while PostMessage is called from within message queues

48. Menu is -----

A. GDI Object

B. Resource

C. Picture

D. Item

49. Following is not type of Device Context

A. Screen Device Context

B. Window Device Context

C. Client area Device Context

D. View Device Context

50. Modal DialogBox is created on _____ & ModallessDialogBox is created on _____.

A. heap , stack

B. stack , heap

51. Which of the following are resources.

Menu

Bitmap

StatusBarIcon

52. _____ function creates modal dialog box.

createDialog()

DialogBox()

DlgBox()

lunknown

53. _____ is return type of window procedure.

handle to the window

LRESULT

BOOL

INT

54. To subclass window's background brush _____ API call is used.

SetClassLong()SetClass()

SetLongClass()

SetLong()

55. _____ , _____ , _____ & _____ are the parameters of WinMain().



hInstance , hPrevInstance , messege , iCmdShowhInstance , hPrevInstance , szCmdLine , iCmdShowwnd
, message , wParam , lParamhInstance ,message , wParam , lParam

56. _____ is first message passed to window procedure.

WM_PAINT

WM_CREATE

WM_SHOW

WM_COMMAND

57. _____ function creates modeless dialog box.

CreateDialog()Dailog()

CreateDialogBox()

DialogBox()

58. Write Windows messages in higher order

1. WM_TIMER

2. Posted Message

3. WM_LBUTTONDOWN

4. Sent Message

5. WM_PAINT

1 , 2 , 3 , 4 , 55 , 4 , 3 , 2 , 1

2 , 3 , 4 , 5 , 1

3 , 4 , 5 , 1 , 2

59. Write steps to create standard windows application

1) Initialise and Register Window class

2) Create window

3) Display Window

4) Message loop

5) WndProc1 , 2 , 3 , 4 , 5

2 , 3 , 4 , 5 , 1

3 , 4 , 5 , 1 , 2

4 , 5 , 1 , 2 , 3

60. A windows program should have a message loop comprising of GetMessage(), DispatchMessage()
and TranslateMessage() to process messages from the message queue.

true

false

not always

61. GetDC() is used to retrieve the device context handle for the windows client area when processing a
WM_PAINT message.

true

false

not always

62. If a printable key is pressed then WM_CHAR message will be generated and the ASCII code of the
key will be stored in wParam.

true

false

not always



63. Whenever WM_LBUTTONDOWN, WM_MOUSEMOVE, WM_RBUTTONDOWN messages are generated that time LOWORD(wParam) and HIWORD(wParam) consists of x and y coordinates of the mouse pointer.

true

false

not always

64. Predefined controls send WM_COMMAND message whereas common controls send WM_NOTIFY message.

true

false

not always

65. A Device Context is a GDI structure, which deals with text and graphics.

true

false

not always

66. A Metafile is a collection of GUI functions that are encoded in a binary format.

true

false

not always

67. A Clipboard is used to transfer information between applications or within application.

true

false

not always

68. WinMain is an entry point for windows application.

True

False

Not Always

69. Menu is GDI Object.

True

False

Not Always

70. WINAPI is a API function which explicitly calls Operating System to run Window Procedure.

True

False

Not Always

71. When function key(s) pressed on the keyboard that time WM_KEYDOWN message is generated.

True

False

Not Always

72. LRESULT is a return type of Dialog Procedure.

True

False

Not Always



73. SetPixel is used to draw a particular pixel with a particular color.

- True
- False
- Not Always

74. GetROP2 () is used to get the current drawing mode.

- True
- False
- Not Always

75. Palette is an attribute of a device context.

- True
- False
- Not Always

76. Windows TIMER is not an input device.

- True
- False
- Not Always

77. In MDI application the default window procedure for main Window is DefWindowProc ().

- True
- False
- Not Always

78. The WM_INITDIALOG message is sent to the dialog box procedure immediately before a dialog box is displayed.

- True
- False
- Not Always

79. In MDI application child windows are created by mainframe windows.

- True
- False
- Not Always

80. Cursor is a GDI Object.

- True
- False
- Not Always

81. SubClassing means changing the behaviour of the controls.

- True
- False
- Not Always

82. Color Dialog box is a common dialog box.

- True
- False
- Not Always



83. If you want your window procedure to receive double click mouse message that time, you must include the identifier _____ in a window class structure before calling RegisterClassEX ().

CS_DBLCLKS

CS_DBLCLICKS

CS_DBLS

CS_DOUBLECLICKS

84. _____ is used to play the metafile.

PlayMeta

PlayFile

PlayMetafile

OpenMetafile

85. To use the windows common controls always include _____ .h header file.

a) COMMONCTL

b) COMCTL

c) COMMDLG

d) COMMCTL

86. You can obtain the state of Shift keys by using _____ function.

GetKeyState()

Key_getValue()

GetState()

GetStatus()

87. Entry point function of a DLL is _____.

Main()

DLLMain()

StartDLL()

RunDLL ()

88. _____ is a function for creating a Thread.

NewThread()

Thread ()

CreateThreadInstance ()

CreateThread ()

89. InvalidateRect sends _____ message in message queue.

WM_COMMAND

WM_PAINT

WM_DISPLAYCHANGE

WM_CHANGE

90. For drawing an Icon on client area of window _____ function is used.

PaintIcon()

PasteIcon ()

DrawIcon()

LoadIcon ()

91. You can create a logical font by calling which of the following functions.

CreateFont()

CreateFontdirect()

CreateFontIndirect()

NewFont ()



92. Dynamic Linked Library is loaded in the memory at_____

- Static time
- Run time
- Load Time
- Compile Time.

93. Menu is _____

- GDI Object
- Resource
- Picture
- Item

94. Which API call is used to check what type of data available in clipboard.

- IsClipboardFormatAvailable ()
- IsClipboardContainData ()
- IsTypeofData ()
- SetClipboardData ()

95. Following option is not a mapping mode.

- MM_ISOTROPIC
- MM_TEXT
- MM_BITMAP
- MM_HIMETRIC

96. Following is not a type of device context

- Screen Device Context
- Window Device Context
- Client Area Device Context
- View Device Context

97. Following is not a raster operation.

- R2_COPYPEN
- R2_XORCOPYPEN
- R2_NOT
- R2_YES

98. Every instance of a running program is _____ of virtual address space.

- 4 GB
- 2 GB
- 6 GB
- 64 MB

99. Default size of heap is ____

- 2 MB
- 1 MB
- 32 MB
- None of the above

100. Following is not a bitmap related API call.

- PasteBlt ()
- BitBlt ()



StretchBlt ()

PatBlt ()

101. Windows Message contains following information.

Visible property of a window

Caption of window

Handle of window

Root class of a window

102. _____ is a lowest priority message in Windows Programming. (Win 32 Programming)

WM_PAINT

WM_COMMAND

WM_CHAR

WM_TIMER

103. SetROP2() function is used to change the Raster Operation the Device Context.

true

false

Not Always

104. CreateEnhMetaFile returns handle of the metafile.

true

false

Not Always

105. Clipboard can store 'n' no of formats at a time.

true

false

Not Always

106. If 4 windows are running in a single application then there are 4 Message Queues.

true

false

Not Always

107. With CreateWindow _____ and _____ functions are used to display the window.

DisplayWindow(), UpdateWindow()

ShowWindow(), DialogBox()

ShowWindow(), UpdateWindow()

ShowWindow(), RepaintWindow()

108. The Windows system32 directory contains files which provides function to user application to perform certain task in the windows environment.

GDI32.DLL

KERNEL32.DLL

USER32.DLL

WIN32.DLL

109. The layer between the application and different types of hardware

Application Layer



GDI layer
DataLayerShellLayer

110. The Message received if the right mousebutton is pressed in thtnonclient is

WM_RBUTTONDOWN
WM_NCRBUTTONDOWN
WM_NCIRBUTTONDOWN
WS_RBUTTONDOWN

111. In order to receive Doubleclick message a window must be created with which window style?

DB_DBLCLK
CS_DBLCLICK
CS_DBLCLKS
CS_DBLCLK

112. Which message helps in detecting mouse movement and finding mousecursor position

WM_MOUSEMOVE
WM_MOUSEPOS
WM_ONMOUSEMOVE
None of these

113. When child Control in a dialogbox is activated window sends which message?

WM_COMMAND
SendDlgItem
WM_NOTIFY
WM_ACTIVATE

114. Which function will test whether the message is fr the dialogbox or the window?

DlgMessage()
SendDlgMessage()
TranslateMessage()
IsDialogMessage()

115. Which function creates a modal dialog box?

CreateDialog()
DialogBox()
DoModal()
CreateDialogBox()

116. Which function creates a modales dialog box?

CreateDialog()
DoModal()
DialogBox()
CreateDialogBox()

117. Modal DialogBox is destroyed by calling which function?

EndDialog()
DestroyDialog()
EndDialogBox()
EndModal()



118. Which function sends a message to controls in a dialogbox?

- SendDlgItemMessage()
- SendDialogMessage()
- SendDialogItemMessage()
- none of these

119. The register() function takes a pointer to the WndClass structure as a parameter

- True
- False

120. WM_CHAR is a combination of WM_KEYUP and WM_KEYDOWN.

- True
- False

121. Only ModlessDialogbox can be moved on the screen.

- True
- False

122. The ID value for the child window is passed by lParam Parameter with the message.

- True
- False

123. In which message it is better to initialize all the controls within the dialogbox.

- WM_CREATE
- WM_INITDIALOG
- WM_INIT
- WM_COMMAND

124. The CopyMetaFile function copies the content of a window-format MetaFile to Specified File

- CreateMetaFile
- CopyMetaFile
- CopyDataGetMetaFile

125. TranslateMessage Detects a Keyboard action that translates to an ANSI Character

- True
- False

126. ScreenCoordinates are pixels measured from the upper left corner of the window's client area.

- True
- False

127. SelectObject function obtains an object from Device Context

- True
- False

128. CreatePen Return handle to Old Pen

- True
- False

129. Which function use to copy file from one DeviceContext to another

- DeviceContextBitBltCreateCompatibleDcCopyBltCopyBlt



130. Handle to BITMAP is

- HBITMAP
- HBMP
- HACCEL
- HDC

131. To Create Thread Function used is

- AfxBeginThreadCreateThreaddoThread
- Create

132. WM_CREATE Message is generated after Window is Displayed

- True
- False

133. The Thread Control Panel is capable of performing the following action

- Setting Thread Priority
- Suspending a Thread
- Resuming Thread
- Terminating a Thread

134. which values are used to Set thread priority

- 15
- 2
- 4
- 1

135. To display a modless dialog which property u have to add in its resource files?

- WM_SHOW
- WS_SHOW
- WS_VISIBLE
- WS_DISPLAY

136. A Mouse Click on MenuBar generates:

- WM_COMMAND
- WM_NOTIFY
- WM_CHAR
- WM_MENUClick

137. change in the size of the status bar generates:

- WM_RESIZE
- WM_SIZE
- WM_CHANGE
- WM_COMMAND

138. Get TextMatrix() determines the physical dimension of the font currently selected in the DC.

- True
- False

139. BeginPaint() Prepares the windows client area for painting.

- True
- False



140. Rectangle function takes :

- 2 Parameters
- 5 Parameters
- 4 Parameters
- None Of the Above

141. The WndClass Structure must be registered with the window before it can be used to create a window.

- True
- False

142. To halt the execution of a thread:

- KillThread()
- SuspendThread()
- TerminateThread()
- None of These

143. The following are the steps of SDLC

- 1. Analysis
- 2. Design
- 3. Testing
- 4. All of the above

Correct Answer : 4

144. The SDLC Model most suitable for large projects with clear knowledge & priority of requirements is

- 1. Spiral Model
- 2. Incremental Model
- 3. Waterfall Model
- 4. Prototyping Model

Correct Answer : 2

145. Which of the following is not true about the Waterfall Model?

- 1. It is suited for small projects
- 2. It does not consider risk handling
- 3. It gives efficient staff utilization
- 4. It needs clarity of requirements at start.

Correct Answer : 3

146. Prototyping in software process may involve _____.

- 1. throw - away prototyping
- 2. evolutionary
- 3. Both a and b options
- 4. None of these

Correct Answer : 3

147. Which of the following model may require largest deployment of manpower

- 1. Incremental Model
- 2. Waterfall Model
- 3. Component Assembly Model



4. RAD Model

Correct Answer : 4

148. The majority of the lifetime of a program is spent in the _____ phase

1. Maintenance
2. Analysis
3. Design
4. Testing

Correct Answer : 1

149. In Boehm's spiral model, each loop in the spiral represents _____ of the software process

1. phase
2. design
3. documentation
4. none of the above

Correct Answer : 1

150. Which of the following is seen in the DFD but not in the Context Diagram

1. Data Sources
2. Data Flows
3. Data Stores
4. Users

Correct Answer : 3

151. Data flow cannot take place between

1. a store & a process
2. external entity & process
3. store & an external entity
4. process & process

Correct Answer : 3

152. "Balancing of DFD" means

1. conservation of inputs & outputs at various levels
2. Sub dividing a process into smaller subprocesses
3. Labelling of all data items
4. Allowing data flows to take place only to or from processes

Correct Answer : 1

153. A data flow diagram is not a

1. logical model of a system
2. good guide to a system
3. representation of the physical system
4. All of these options

Correct Answer : 3

154. DFDs, decision tables, decision trees are tools of

1. Requirements analysis
2. Requirements modelling
3. Software Design
4. All of the above

Correct Answer : 4

155. Which model used to show data processing at different levels of abstraction from fairly abstract to fairly detailed

1. Semantic Data Models
2. Object Model
3. Data Flow Models
4. Service Usage Models

Correct Answer : 3

156. _____ models describe the logical structure of the data which is imported to and exported by the system.

1. Object
2. Semantic data
3. Data flow
4. None of the above

Correct Answer : 2

157. Which of the following is true about E-R Diagrams?

1. They consist of object-relationship pairs
2. It indicates cardinality of relationships
3. It indicates modality of relationships
4. all of the above

Correct Answer : 4

158. Which of the following is not a characteristic of a good SRS document?

1. Unambiguous
2. Verifiable
3. Redundant
4. Consistent

Correct Answer : 3

159. Find the odd one out

1. Axiomatic Specification
2. Algebraic Specification
3. Z Specification
4. Data Flow Diagram

Correct Answer : 4

160. Which is the most undesirable form of cohesion from the following options

1. Sequential
2. Coincidental
3. Temporal
4. Communicational

Correct Answer : 2

161. The external interface design process should be _____

1. developer centered
2. user centered
3. administrator centered
4. management centered

Correct Answer : 2

162. Which of the following is true with respect to function oriented & object oriented design methodologies

1. They vary in the basic abstractions they use
2. They vary in the way state information is maintained
3. They vary in the way functions are grouped
4. All of the above

Correct Answer : 4

163. In which of the following phases of a use-case driven process do you think use cases have a role?

a) Requirements capture b) Analysis c) Design d) Implementation e) Test

1. a, b and c
2. a, b, c and d
3. b and d
4. a, b, c, d and e

164. Which of the following is NOT true about comments

1. Comments should use problem domain terminology
2. They should explain the code at crucial places only
3. They should be used to document changes to the code
4. They add up to the LOC size of the software

Correct Answer : 4

165. Use of coding standards

1. eases the task of integration of software modules
2. enhances the maintainability of the software
3. enhances reusability of the software
4. All of these options

Correct Answer : 4

166. _____ is a programming method which combines data and instructions for processing that data into a self-sufficient block that can be used in other programs.

1. modular programming
2. top down design
3. object oriented programming
4. structured programming

Correct Answer : 3

167. A test case design technique that makes use of a knowledge of the internal program logic

1. Black Box Testing
2. White Box Testing
3. Unit Testing
4. None of these

Correct Answer : 2

168. Black box test cases can be derived from

1. source code
2. flowchart
3. SRS Document
4. pseudocode

Correct Answer : 3

169. Which of the following is true about Boundary Value Analysis?

1. It is an approach to designing black box test cases
2. It is complementary to Equivalence Class Partitioning
3. It gives test cases based on the boundaries of the equivalence classes
4. All of the above

Correct Answer : 4

1. Cyclomatic complexity is calculated from

1. Data Flow Graph
2. Structure Chart
3. Control Flow Graph
4. All of the above

Correct Answer : 3

170. Which of the following is true about McCabe's Cyclomatic Complexity of a Program

1. It is an indicator of the structural complexity of a program
2. It gives the maximum no of independent paths in a program
3. It is calculated from the no. of edges & nodes in the Control Flow diagram
4. All of the above

Correct Answer : 4

Effective Software Project Management focusses on

1. People
2. Problem
3. Process
4. all of above

Correct Answer : 4

171. Which of the following is generally not a part of the SPMP document?

1. Configuration Management Plan
2. Quality Assurance Plan
3. Risk Management Plan
4. Requirements Elicitation Plan

Correct Answer : 4

172. Conversion of Adjusted Function Point Count to LOC count is dependent on

1. Team Size
2. Project Duration
3. Programming Language
4. Cost Drivers

Correct Answer : 3

173. The critical path of PERT/CPM chart cannot be

1. the path with the longest duration
2. more than one unique path
3. path on which any delays are allowed
4. path with same earliest and latest starts for all activities

Correct Answer : 3

174. The total float for an activity is

1. the total duration of the activity
2. the difference between the earliest finish time and earliest start time
3. the difference between the latest finish time and the earliest finish time
4. the difference between the latest finish time and the earliest start time

Correct Answer : 3

175. Which of the following are Software Risk Components

1. Performance
2. Cost
3. Schedule
4. all of the above

Correct Answer : 4

176. Risk of unrealistic estimates & schedules can be overcome by

1. Using objective methods of estimation rather than judgemental methods
2. Developing a culture of software reuse
3. Performing multisource estimations
4. all of the above

Correct Answer : 4

177. Under SCM the various SCIs are strictly maintained

1. by their respective authors
2. by the appropriate team
3. in a central project database
4. all of the above

Correct Answer : 3

178. Cleanroom Software Development process is based on

1. Formal Specification
2. Static Verification
3. Statistical Testing
4. All of the above

Correct Answer : 4

179. Which one of the following is method is not used in describing complex system process

1. Decision table
2. Structure English
3. Finite automata
4. Binary tree

Correct Answer : 4

180. Productivity can measure from the relationship

1. Productivity = KLOC/person-month
2. Productivity = KLOC/defects
3. Productivity = KLOC/LOC
4. Productivity = KLOC*person-month

Correct Answer : 1

181. Broad design of modules & their relationships is called



1. external design
2. detailed design
3. architectural design
4. process design

Correct Answer : 3

182. Pick up the odd one out of the following process models

1. Component assembly model
2. Prototyping Model
3. Spiral model
4. Waterfall Model

Correct Answer : 4

183. The Linear Sequential or Classic Life Cycle is also called

1. Waterfall Model
2. Incremental Model
3. Spiral model
4. Prototyping Model

Correct Answer : 1

184. The waterfall model of the software process considers each process activity as a _____ phase

1. separate
2. discrete
3. Both a and b options
4. None of the above

Correct Answer : 3

185. Which of the following is not a feature of RAD

1. Well understood, constrained & modularizable requirements
2. Component based construction & use of 4 GL
3. Use of multiple teams each developing separate function
4. Project has high technical risks

Correct Answer : 4

186. In the Spiral model the radius of the spiral at any point represents

1. the level of risk
2. the progress made in the current phase
3. the cost incurred in the project till then
4. None of these

Correct Answer : 3

187. Planning the modular program structure & control relationships between modules is called

1. Architectural Design
2. High Level Design
3. System Design
4. all of the above

Correct Answer : 4

188. Designers should aim to produce strongly _____ and weakly _____ designs

1. coupled, functional
2. maintainable, cohesive
3. cohesive, coupled



4. coupled, cohesive

Correct Answer : 3

189. Use of global data areas or global variables may lead to

1. Stamp Coupling
2. Common Coupling
3. Content Coupling
4. Control Coupling

Correct Answer : 2

Correct Answer : 4

190. Function oriented design process consists of

1. Data Flow Design
2. Structural decomposition
3. Detailed Design
4. all of the above

Correct Answer : 4

191. Transform Analysis performed on a DFD identifies the

1. Afferent Branch
2. Efferent Branch
3. Central Transform
4. all of the above

Correct Answer : 4

192. The two questions "Are we building the right product?" & "Are we building the product right?" correspond to

1. Verification only
2. Validation only
3. Validation & Verification respectively
4. Verification & Validation respectively

Correct Answer : 3

193. Which of the following is not a White box testing method

1. Statement coverage
2. Error guessing
3. Path coverage
4. Condition Coverage

Correct Answer : 2

194. A stub is a dummy version of the _____ module of the module under testing

1. superordinate
2. subordinate
3. coordinate
4. All of the above

Correct Answer : 2

195. A driver is a dummy version of the _____ module of the module under testing

1. superordinate
2. subordinate
3. coordinate
4. All of the above

Correct Answer : 1

196. _____ exercises the system beyond its maximum design load

1. Thread testing
2. Stress Testing
3. Back to back testing
4. all of the above

Correct Answer : 2

197. Presenting the same tests to different versions of the system and compare outputs is called

1. Thread testing
2. Stress Testing
3. Back to back testing
4. all of the above

Correct Answer : 3

198. Which of the following is not a part of Project Plan?

1. Risk Management Plan
2. Personnel Plan
3. Project Monitoring Plan
4. Software Architecture Planning

Correct Answer : 4

199. Which of the following is true for two projects of same category with the same estimated LOC size and using COCOMO for estimation A) The initial effort estimate for both projects will be same as both have same LOC B) The Effort Adjustment Factor will always be the same for both projects C) The final effort estimate will always be the same for both projects

1. Only A is true.
2. Only A & B are true
3. Only C is true
4. Neither A, B or C are true.

Correct Answer : 1

200. In COCOMO terminology a project with software being strongly coupled to complex hardware & stringent regulations on operating procedures is categorised as

1. Organic
2. Semidetached
3. Embedded
4. Application

Correct Answer : 3

201. Which version of COCOMO develops estimates for large projects as sum of estimates of its various subsystems by considering the differences in the complexities of its various subsystems



1. Basic COCOMO
2. Intermediate COCOMO
3. Complete COCOMO
4. None of the above

Correct Answer : 3

202. The minimum time required to finish the project can be estimated by considering the _____ path in the activity graph

1. Shortest
2. Longest
3. Average
4. SPT

Correct Answer : 2

203. PERT/CPM cannot be used for

1. Scheduling of projects
2. Monitoring & Control of projects
3. Optimising Resource Utilization
4. Quality control of products

Correct Answer : 4

204. Democratic team structure is suitable for projects

1. with strict deadlines
2. with clearly known requirements
3. with research orientation
4. None of these

Correct Answer : 3

205. Arrange the following activities in Risk Assessment in the correct sequence a. Prioritization b. Identification c. Analysis

1. b, a, c
2. b, c, a
3. a, b, c
4. c, a, b

Correct Answer : 2

206. _____ ensures that a set procedure is followed to make any changes to the software

1. Configuration Identification
2. Configuration Control
3. Baselining
4. all of the above

Correct Answer : 2

207. Configuration Management is

1. framework activity
2. umbrella activity
3. one time activity
4. None of the above

Correct Answer : 3

208. CASE stands for

1. Computing Advanced System Engineering



2. Computer Aided Software Engineering
3. Calculating Arithmetic System Engineering
4. None of the above

Correct Answer : 2

209. Requirement phase is usually done by

1. System Analyst
2. System Administrator
3. System Engineer
4. All

Correct Answer : 1

210. Which one of the following is not considered as parameter of function point

1. Number of input
2. Number of interface
3. Number of file
4. Number of output data

Correct Answer : 4

211. CASE is expanded as

1. Computer Analysis Software Engineering
2. Computer Aided Software Engineering
3. Computer Aided System Engineering
4. Computer Analysis System Engineering

Correct Answer : 2

212. Cohesion is the concept which tries to capture this -----

1. Intra-Module
2. Extra-Module
3. Inner-Module
4. Outer-Module

Correct Answer : 1

213. Functional approach is also known as

1. Glass box testing
2. Black box testing
3. Input box testing
4. Output box testing

Correct Answer : 2

214. Object oriented technology's use of _____ facilitates reuse of the code and architecture while its _____ feature provides systems with stability, as a small change in requirements doesn't require massive changes in the system.

1. Inheritance, Encapsulation
2. Inheritance, Polymorphism
3. Encapsulation, Polymorphism
4. Polymorphism, Abstraction

Correct Answer : 1

215. Which of the following steps do you think developers should take to create efficient compact applications?

- a. Clearly define initial requirements of the system



- b. concentrate early development efforts on modeling implementation mechanisms
 - c. Analyze and manage risk throughout the development process
 - d. Leave all software testing until after system has been implemented
1. a, c
 2. a, b
 3. a, b, d
 4. a, b, c

Correct Answer : 1

216. Which of the following elements combine to form OOAD method

- a. Notation
 - b. Diagram
 - c. Process
 - d. View
1. a, c
 2. a, b
 3. a, b, d
 4. a, b, c

Correct Answer : 1

217. Which of the following are aims of UML?

- a. To model system using OO concepts
 - b. To provide a process for software development
 - c. To support small-scale and large-scale analysis and design
 - d. To provide an insight into implementation mechanism
1. a, c
 2. a, b
 3. a, b, d
 4. a, c, d

Correct Answer : 4

218. Towards end of the design phase, _____ should be allocated to source code components.

1. use cases
2. relationships
3. models
4. classes

Correct Answer : 4

219. What do you think is the first step you should take in designing any project?

1. design a prototype
2. create the test cases
3. define problem domain and produce problem statement
4. draw up a plan for entire project

Correct Answer : 3

220. If you are finding hard to identify the name of class and to write definition for it. What thing you should do?

1. ignore class completely
2. do more analysis to get a better understanding of what is involved in the class
3. write a definition for the class even if it is not very good
4. make it a friend class of some other main class

Correct Answer : 2

221. Which of the following statements are true of use cases and use case models?

- a. functionality of a use-case has to be complete from start to finish
- b. use case provide developers with classes and operations
- c. use cases outline functionality of the system
- d. use case models can be used to test the system

- 1. a, b, c
- 2. a, b, c, d
- 3. a, c, d
- 4. a, c

Correct Answer : 3

222. class diagram represents

- 1. conceptual design
- 2. organization of objects
- 3. set of actions
- 4. state machine

Correct Answer : 1

223. collaboration diagram represents

- 1. organization of objects
- 2. messages on time scale
- 3. conceptual design
- 4. set of actions

Correct Answer : 1

224. state chart diagram

- 1. organization of objects
- 2. conceptual design
- 3. set of actions
- 4. state machine

Correct Answer : 4

225. In OOD primary abstraction mechanism is _____

- 1. function
- 2. class
- 3. object
- 4. hierarchy

Correct Answer : 2

226. incremental model _____

- 1. delivers a system in a series of versions
- 2. works with encapsulation and inheritance to simplify flow of control
- 3. builds a bridge between user and developer
- 4. uses experimental software to better understand user requirements

Correct Answer : 1

227. prototyping model _____

- 1. delivers a system in a series of versions
- 2. builds a bridge between user and developer
- 3. uses experimental software to better understand user requirements
- 4. works with encapsulation and inheritance to simplify flow of control

Correct Answer : 3

228. software re-engineering actually means reverse engineers

229. re-engineering is a type of software maintainance

230. elements of software architecture of a computing systems include

- a. software components
 - b. class diagrams
 - c. connectors expressing relationships between software components
 - d. E-R diagram
- 1. a, b
 - 2. a, c
 - 3. a, c, d
 - 4. a, b, c, d

Correct Answer : 2

231. Project milestones are mainly divided in these two parts

- 1. DFD and SRS
- 2. interface design and implementation
- 3. feasibility study and detailed design
- 4. requirements and design

Correct Answer : 4

232. . Which is not part of testing?

- 1. white box testing
- 2. black box testing
- 3. inner testing
- 4. gorilla testing

Correct Answer : 3

233. Which is not part of phases of software development

- 1. high level design
- 2. low level design
- 3. mid level design
- 4. replication, delivery, installation

Correct Answer : 3

234. Which software development model incorporates risk management?

- 1. water fall model
- 2. spiral model
- 3. incremental model
- 4. object model

Correct Answer : 2

235. largest time is spent on which of the software development phase?

- 1. testing
- 2. enhancement
- 3. bug fixing
- 4. analysis and design

Correct Answer : 2

236. Simple SDLC contain

- 1. requirements, analysis, design, implementation, testing
- 2. analysis, design, implementation, testing, deployment
- 3. analysis, design, implementation, testing, maintainence
- 4. requirements, analysis, design, implementation, deployment

Correct Answer : 1

237. DFD is not a



1. logical model of system
2. good guide to a system
3. representation of physical stream
4. all of the above

Correct Answer : 1

238. Productivity metrics

1. focuses on the output of the development process.
2. focuses on the characteristics of the software.
3. provide indirect measure.
4. All.

Correct Answer : 1

239. Which is not a type of maintenance?

1. Adaptive
2. Corrective
3. Perfective
4. Obsolescence

Correct Answer : 4

240. Adaptive Maintenance is

1. To improve the system in some way by changing its basic functionality
2. The maintenance due to changes in the environment
3. The correction of undiscovered system errors
4. None of the above

Correct Answer : 2

241. Which of the following activities involves choosing a system structure capable of satisfying the requirement specification?

1. Requirements Analysis
2. Design
3. Coding
4. Testing

Correct Answer : 2

242. Reliability in a software system can be achieved using the following strategies, EXCEPT

1. Fault avoidance
2. Fault tolerance
3. Fault detection
4. Fault rectification

Correct Answer : 3

243. Agile methods are known as

Predictive

Adaptive

Process Oriented

Short term process methods.

244. Identify the true statements about using a process for software development.

- a) Processes usually divide software development into phases
- b) Processes provide guidelines for what to do at each phase of development
- c) Processes are used o
 1. a and c
 2. a and b
 3. a, b and d
 4. a, c and d

Correct Answer : 3

245. Process visibility is enhanced by

1. Defining clear cut phases
2. Producing documents related to each phase
3. Conducting reviews & checks
4. all of the above

Correct Answer : 4

246. Which of the following activities is not considered as "Umbrella Activity"

1. S/W Quality assurance
2. Software Design
3. S/W configuration management
4. S/W Project Monitoring & Control

Correct Answer : 2

247. SDLC starts with _____ stage

1. User Requirement and Analysis
2. Deployment
3. Testing
4. Design

Correct Answer : 1

248. The analysis phase takes a _____ approach to the system, ignoring its inner workings whereas the design phase takes a _____ approach, making decisions on how the model will be implemented in code

1. White box & Black box
2. Black box & White box
3. Top-Down & Bottom-Up
4. Bottom-Up & Top-Down

Correct Answer : 2

249. The last step in System Development Life Cycle is _____

1. Analysis
2. Implementation
3. Testing
4. Maintenance

Correct Answer : 3

250. The _____ phase of the systems life cycle contains periodic evaluations and updates of the system

1. preliminary investigation
2. Systems analysis
3. Systems implementation
4. Systems maintenance

Correct Answer : 4

251. The type of software maintenance which is done to add new features to the product is called

1. Corrective Maintenance
2. Adaptive Maintenance
3. Regressive Maintenance
4. Perfective Maintenance

Correct Answer : 4

252. The choice of the Software Development Life Cycle Model to be followed for a project depends on
A) Initial Clarity of Requirements B) Size of the Project C) Time Frame of the Project D) Clarity on Technical Issues

1. A, B & C only
2. A, B & D only
3. A, B, C & D
4. A & D only

Correct Answer : 3

253. Because of the cascade from one phase to another, the model of software development process is known as

1. Evolutionary model
2. Formal model
3. Waterfall model
4. None of the above

Correct Answer : 3

254. The Linear Sequential or Classic Life Cycle is also called

1. Waterfall Model
2. Incremental Model
3. Spiral model
4. Prototyping Model

Correct Answer : 1

255. Prototype may be used for

1. Risk Reduction
2. Requirements Elicitation
3. User Interface Design
4. all of the above

Correct Answer : 4

256. RAD Model is high speed implementation of

1. Waterfall Model
2. Spiral Model
3. Prototyping model
4. Component Assembly model

Correct Answer : 1

257. _____ means to build a model that can be modified before the actual system is installed

1. Maintenance
2. Prototyping
3. Implementation
4. None of the above

Correct Answer : 2

258. A requirement may be a description of

1. functionality to be provided



2. constraint on the software
3. external interface
4. all of the above

Correct Answer : 4

259. Data Models do not consider

1. Attributes of the data object
2. Relationships between data objects
3. Operations that act on the data
4. Any of the above

Correct Answer : 3

260. Notations used to specify the external characteristics, architectural structure, and processing details of a software system include I. Data Flow Diagrams II. HIPO diagrams III. Structure Charts

1. I and II Only
2. III Only
3. I, II and III
4. None of the above

Correct Answer : 3

261. Formal specification language consists of

1. syntax
2. semantics
3. set of relations
4. all of the above

Correct Answer : 4

262. The software architecture is best represented by

1. Context Diagram
2. Flow Chart
3. Structure Chart
4. Data Flow Diagram

Correct Answer : 3

263. Designers should aim to produce strongly _____ and weakly _____ designs

1. coupled, functional
2. maintainable, cohesive
3. cohesive, coupled
4. coupled, cohesive

Correct Answer : 3

264. Using _____ a programmer can detail the logic of the program

1. pseudocode
2. software
3. context diagram
4. data flow diagram

Correct Answer : 1

265. Which of the following is not true about a flow chart?

1. It shows the flow of control of a program
2. It is a tool for detailed design



3. Data interchange is not represented
4. It clearly separates various modules of the software

Correct Answer : 4

266. _____ involves modeling a system as a set of interacting functional units.

1. Object oriented decomposition
2. Procedural decomposition
3. Functional decomposition
4. None of the above

Correct Answer : 3

267.. Typographical errors and/or incorrect use of the programming language is referred to as

1. logic errors
2. syntax errors
3. run time errors
4. A bug

Correct Answer : 2

268. Testing of software falls after _____ stage.

1. Designing
2. Implementation
3. Deployment
4. Coding

Correct Answer : 4

269.. Changes made to the software to accommodate changes to its environment is called

1. perfective maintainence
2. regressive maintainence
3. adaptive maintainence
4. corrective maintainence

Correct Answer : 3

270.. Major changes made to software after long periods is also called software reengineering or

1. perfective maintainence
2. regressive maintainence
3. adaptive maintainence
4. corrective maintainence

Correct Answer : 2

271. Which of the following is not a part of Project Plan?

1. Risk Management Plan
2. Personnel Plan
3. Project Montoring Plan
4. Software Architechture Planning

Correct Answer : 4

272. Function Point Count is dependent on

1. Platform & Technology
2. Team Size
3. H/W & Software Resources
4. Features & Functionalities

Correct Answer : 4

273. In COCOMO terminology a project with mixed level of staff experience & part familiarity with the system being developed is categorized as

1. Organic
2. Semidetached
3. Embedded
4. Application

Correct Answer : 2

274. In COCOMO terminology a project with software being strongly coupled to complex hardware & stringent regulations on operating procedures is categorised as

1. Organic
2. Semidetached
3. Embedded
4. Application

Correct Answer : 3

275. The value of COCOMO cost driver attribute for higher than average Programmer Ability will be

1. Greater than 1
2. Equal to 1
3. Less than 1
4. None of these

Correct Answer : 3

276. _____ and _____ are graphical notations which are used to illustrate the project schedule.

1. Bar chart and DFD
2. ERD and Bar chart
3. Class diagram and activity networks
4. Bar chart and activity networks

Correct Answer : 4

277. The total float for an activity is

1. the total duration of the activity
2. the difference between the earliest finish time and earliest start time
3. the difference between the latest finish time and the earliest finish time
4. the difference between the latest finish time and the earliest start time

Correct Answer : 3

278. The minimum time required to finish the project can be estimated by considering the _____ path in the activity graph

1. Shortest
2. Longest
3. Average
4. SPT

Correct Answer : 2

279. According to Putnam the staffing pattern of a software project follows the Rayleigh-Norden curve and peaks during the _____

1. Detailed design
2. Coding & Unit testing



3. Integration Testing
4. System Testing

Correct Answer : 2

280. Risks arising out of frequent change requests are best mitigated by

1. User characterization
2. Strong SCM
3. Multisource estimations
4. Prescheduling key personnel

Correct Answer : 2

281. Risk of unrealistic estimates & schedules can be overcome by

1. Using objective methods of estimation rather than judgemental methods
2. Developing a culture of software reuse
3. Performing multisource estimations
4. all of the above

Correct Answer : 4

282. Automated SCM tools help solve problem of

1. Inconsistencies of SCIs
2. concurrent access to SCI
3. instability of development environment
4. All of these options

Correct Answer : 4

283. _____ ensures that a set procedure is followed to make any changes to the software

1. Configuration Identification
2. Configuration Control
3. Baselining
4. all of the above

Correct Answer : 2

284. Configuration Management is

1. framework activity
2. umbrella activity
3. one time activity
4. None of the above

Correct Answer : 3

285. Under SCM the various SCIs are strictly maintained

1. by their respective authors
2. by the appropriate team
3. in a central project database
4. all of the above

Correct Answer : 3

286. CASE stands for

1. Computing Advanced System Engineering
2. Computer Aided Software Engineering
3. Calculating Arithmetic System Engineering
4. None of the above

Correct Answer : 2

287. Which of the following steps do you think developers should take to create efficient compact applications?

- a. Clearly define initial requirements of the system
- b. concentrate early development efforts on modeling implementation mechanisms
- c. Analyze and manage risk throughout the development process
- d. Leave all software testing until after system has been implemented

- 1. a, c
- 2. a, b
- 3. a, b, d
- 4. a, b, c

Correct Answer : 1

288. Towards end of the design phase, _____ should be allocated to source code components.

- 1. use cases
- 2. relationships
- 3. models
- 4. classes

Correct Answer : 4

289. Which of the following best describes what the problem domain is?

- 1. kinds of resources available to development team
- 2. surroundings in which system operate
- 3. set of all functionality required of a system
- 4. list of technical details needed to implement project

Correct Answer : 2

290. In which of the following phases of use-case driven process do you think use cases have a role?

- a. requirement capture
- b. analysis
- c. design
- d. implementation
- e. test

- 1. a, b, c
- 2. a, b, c, d
- 3. b, d
- 4. a, b, c, e

Correct Answer : 4

291. collaboration diagram represents

- 1. organization of objects
- 2. messages on time scale
- 3. conceptual design
- 4. set of actions

Correct Answer : 1

292. sequence diagram represents

- 1. organization of objects
- 2. messages on time scale
- 3. conceptual design
- 4. set of actions

Correct Answer : 2



293. Analysis takes place from _____ perspective and design takes place from _____ perspective

1. user, user
2. user, developer
3. developer, user
4. developer, developer

Correct Answer : 2

294.. The _____ phase of SDLC aims at ensuring software product is as per requirements.

1. design
2. development
3. testing
4. deployment

Correct Answer : 3

295. polymorphism _____

1. organizes abstraction
2. builds a bridge between user and developer
3. delivers a system in a series of versions
4. works with encapsulation and inheritance to simplify flow of control

Correct Answer : 4

296. spiral model incorporates risk management

Correct Answer : T

297. storage management is not a part of version management

Correct Answer : F

298. data flow diagrams are part of design phase of SDLC

Correct Answer : T

299. Which is an iterative process through which the requirements are translated to "blueprint" for constructing software

1. testing
2. requirement analysis
3. design
4. maintenance

Correct Answer : 3

300. What manifests in the patterns of choices made among alternative ways of expressing an algorithm is

1. a data flow diagram
2. coding style
3. a data dictionary
4. a flow chart

Correct Answer : 4

301. quality control

1. focuses on inspections, testing and removal of defects before release
2. is a set of planned and strictly and strategic actions to provide confidence that the product or service will satisfy given requirements for quality
3. is to check system for its internal errors



4. all of the above

Correct Answer : 1

302.elements of software architecture of a computing systems include

- a. software components
- b. class diagrams
- c. connectors expressing relationships between software components
- d. E-R diagram

- 1. a, b
- 2. a, c
- 3. a, c, d
- 4. a, b, c, d

Correct Answer : 2

303.which of the following types of test plans is most likely to arise from requirement specification process?

- 1. system integration testing plan
- 2. acceptance test plan
- 3. sub-system integration test plan
- 4. module test plan

Correct Answer : 2

304.In project planning first thing is

- 1. set objectiv or goal
- 2. develop strategies and policies
- 3. decision making
- 4. find out requirement

Correct Answer : 1

305.. Which is not part of phases of software development

- 1. high level design
- 2. low level design
- 3. mid level design
- 4. replication, delivery, installation

Correct Answer : 3

306.Which of the following is not part of spiral model?

- 1. planning
- 2. customer communication
- 3. project documentation
- 4. engineering

Correct Answer : 3

307.DFD is not a

- 1. logical model of system
- 2. good guide to a system
- 3. representation of physical stream
- 4. all of the above

Correct Answer : 1

308.Pick up one of the testing methods given below that is part of white-box testing

- 1. equivalence partitioning



2. boundary value analysis
3. basis and testing
4. debugging

Correct Answer : 3

309. Productivity metrics

1. focuses on the output of the development process.
2. focuses on the characteristics of the software.
3. provide indirect measure.
4. All.

Correct Answer : 1

310. The requirement phase consists of

- a) Problem analysis b) Requirement specification
c) Requirement validation d) Problem validation

1. a, b, c
2. a, b, c, d
3. a, b, d
4. a, c, d

Correct Answer : 2

311. Following are the different steps that are to be followed in design methodology arrange them in an order.

- a) First level factoring b) factoring of input
c) Restate the problem d) Identifying the input and output

1. a, b, c, d
2. c, d, a, b
3. a, d, c, b
4. a, c, b, d

Correct Answer : 2

312. Which is not a type

313. of maintenance?

1. Adaptive
2. Corrective
3. Perfective
4. Obsolescence

Correct Answer : 4

314. COCOMO is an effort estimation model in terms of _____

1. Cost
2. Person- Months
3. Both
4. None of the above

Correct Answer : 2

315. Pick the odd one out

1. Component assembly model
2. Spiral Model
3. Incremental Model
4. Iterative Model

Correct Answer : 1

316. Pick the odd one out

1. Data Flow Diagrams
2. Object Identification
3. Structural Decomposition
4. E-R Diagrams

Correct Answer : 2

317. Which of the following factors of a Software Product may not contribute much directly to its maintainability?

1. Understandability
2. Flexibility
3. Security
4. Testability

Correct Answer : 3

318. Which of the following activities is not considered as "Umbrella Activity"

1. S/W Quality assurance
2. Software Design
3. S/W configuration management
4. S/W Project Monitoring & Control

Correct Answer : 2

319. What is the primary purpose of the first stage of software analysis and design?

1. Determining system deployment
2. Writing code
3. Capturing requirements
4. Building GUIs

Correct Answer : 3

320. SDLC starts with _____ stage

1. User Requirement and Analysis
2. Deployment
3. Testing
4. Design

Correct Answer : 1

321. The analysis phase takes a _____ approach to the system, ignoring its inner workings whereas the design phase takes a _____ approach, making decisions on how the model will be implemented in code

1. White box & Black box
2. Black box & White box
3. Top-Down & Bottom-Up
4. Bottom-Up & Top-Down

Correct Answer : 2

322. Prototype may be used for

1. Risk Reduction
2. Requirements Elicitation
3. User Interface Design
4. all of the above

Correct Answer : 4

323. RAD Model is high speed implementation of

1. Waterfall Model
2. Spiral Model
3. Prototyping model
4. Component Assembly model

Correct Answer : 1

324. In the Spiral model the radius of the spiral at any point represents

1. the level of risk
2. the progress made in the current phase
3. the cost incurred in the project till then
4. None of these

Correct Answer : 3

325. A requirement may be a description of

1. functionality to be provided
2. constraint on the software
3. external interface
4. all of the above

Correct Answer : 4

326. During Requirements Phase recording interface requirements of a software system does not include which of the following interfaces

1. User Interfaces
2. Software Interfaces
3. Hardware Interfaces
4. Module Interfaces

Correct Answer : 4

327. External Entities in a Context Diagram may be A) People B) Other Software Systems C) Hardware D) Databases

1. Only A & D
2. Only B & C
3. Only A, B & D
4. A, B, C & D

Correct Answer : 4

328. Example of a Semantic Data model is

1. data flow diagram
2. Context Diagram
3. Entity Relationship Diagram
4. all of the above

Correct Answer : 3

329. Data Models do not consider

1. Attributes of the data object
2. Relationships between data objects



- 3. Operations that act on the data
- 4. Any of the above

Correct Answer : 3

411. A system developed to give end users a concrete impression of the system capabilities is called

- a) 1. Semantics
- b) 2. model
- c) 3. prototype
- d) 4. abstraction

Correct Answer : 3

412. Formal specification language consists of

- a) 1. syntax
- b) 2. semantics
- c) 3. set of relations
- d) 4. all of the above

Correct Answer : 4

413. Planning the solution to a programming problem using a structured technique is called program

- a) 1. coding
- b) 2. compiling
- c) 3. moduling
- d) 4. design
- e) **Correct Answer : 4**
- f)

414. The software architecture is best represented by

- a) 1. Context Diagram
- b) 2. Flow Chart
- c) 3. Structure Chart
- d) 4. Data Flow Diagram

Correct Answer : 3

415. Conception & planning out of externally observable characteristics of a software is called

- a) 1. External Design
- b) 2. User Interface Design
- c) 3. Both a and b options
- d) 4. None of the above

Correct Answer : 3

416. A way of indicating the desired effect without establishing the actual mechanism

- a) 1. Procedural Abstraction
- b) 2. Data Abstraction
- c) 3. Control Abstraction
- d) 4. None of the above

Correct Answer : 3

417. In case of Bank, what will be the relationship between "Opening of Account" use case and "Deposit" Use case?

A. Uses



- B. Extends
- C. Includes
- D. None of the above

418. The number & complexity of interconnections between two modules is an indicator of

- a) 1. Modularity
- b) 2. Cohesion
- c) 3. Coupling
- d) 4. Abstraction

Correct Answer : 3

419. Use of global data areas or global variables may lead to

- a) 1. Stamp Coupling
- b) 2. Common Coupling
- c) 3. Content Coupling
- d) 4. Control Coupling

Correct Answer : 2

420. The method of deriving the structure chart from the DFD is called

- a) 1. Factoring
- b) 2. Factor Analysis
- c) 3. Transform Analysis
- d) 4. all of the above

Correct Answer : 3

421. Transform Analysis performed on a DFD identifies the

- a) 1. Afferent Branch
- b) 2. Efferent Branch
- c) 3. Central Transform
- d) 4. all of the above

Correct Answer : 4

422. Which of the following is true about structure chart notations?

- a) 1. There should be only one module at the top
- b) 2. There should be at the most one control arrow between two modules
- c) 3. The sequence or order of tasks is not represented
- d) 4. All of the above

Correct Answer : 4

423. A programmer must follow the rules for coding a particular programming language. These rules are called:

- a) 1. pseudocode
- b) 2. iteration
- c) 3. syntax
- d) 4. documentation
- e) **Correct Answer : 3**
- f)

424. Typographical errors and/or incorrect use of the programming language is referred to as

- a) 1. logic errors
- b) 2. syntax errors



- c) 3. run time errors
- d) 4. A bug
- e) **Correct Answer : 2**

425. _____ is the process of locating and eliminating program errors.

- a) 1. editing
- b) 2. correcting
- c) 3. debugging
- d) 4. testing
- e) **Correct Answer : 3**

431. Changes made to the software to accommodate changes to its environment is called

- a) 1. perfective maintenance
- b) 2. regressive maintenance
- c) 3. adaptive maintenance
- d) 4. corrective maintenance
- e) **Correct Answer : 3**

432. Changes made to the software to extend it beyond its original functionality is called

- a) 1. perfective maintenance
- b) 2. regressive maintenance
- c) 3. adaptive maintenance
- d) 4. corrective maintenance
- e) **Correct Answer : 1**
- f)

433. Major changes made to software after long periods is also called software reengineering or

- a) 1. perfective maintenance
- b) 2. regressive maintenance
- c) 3. adaptive maintenance
- d) 4. corrective maintenance
- e) **Correct Answer : 2**
- f)

434. COCOMO is categorized as a _____ estimation technique

- a) 1. Heuristic
- b) 2. Empirical
- c) 3. Analytical
- d) 4. None of the above

Correct Answer : 1

435. The value of COCOMO cost driver attribute for higher than average Programmer Ability will be

- a) 1. Greater than 1
- b) 2. Equal to 1
- c) 3. Less than 1
- d) 4. None of these

Correct Answer : 3

436. _____ and _____ are graphical notations which are used to illustrate the project schedule.

- a) 1. Bar chart and DFD
- b) 2. ERD and Bar chart
- c) 3. Class diagram and activity networks

d) 4. Bar chart and activity networks

Correct Answer : 4

437. Which of the following is true as per Putnam model

- a) 1. Staffing Pattern peaks at Coding & Unit testing
- b) 2. Schedule compression increases effort in proportion to fourth power
- c) 3. Expanding the schedule gives extreme saving in effort
- d) 4. all of the above

Correct Answer : 4

438. Democratic team structure is suitable for projects

- a) 1. with strict deadlines
- b) 2. with clearly known requirements
- c) 3. with research orientation
- d) 4. None of these

Correct Answer : 3

439. RMMM is a Risk Management methodology which focusses on

- a) 1. Risk avoidance by developing a risk mitigation plan
- b) 2. Continuous risk monitoring throughout the project
- c) 3. Actually managing the risks when they become a reality by contingency planning
- d) 4. all of the above

Correct Answer : 4

440. Risks arising out of frequent change requests are best mitigated by

- a) 1. User characterization
- b) 2. Strong SCM
- c) 3. Multisource estimations
- d) 4. Prescheduling key personnel

Correct Answer : 2

441. Risk of unrealistic estimates & schedules can be overcome by

- a) 1. Using objective methods of estimation rather than judgemental methods
- b) 2. Developing a culture of software reuse
- c) 3. Performing multisource estimations
- d) 4. all of the above

Correct Answer : 4

442. A change request has to be evaluated for

- a) 1. its technical merit
- b) 2. cost & schedule impacts
- c) 3. side effects
- d) 4. All of these options

Correct Answer : 4

443. Under SCM the various SCIs are strictly maintained

- a) 1. by their respective authors



- b) 2. by the appropriate team
- c) 3. in a central project database
- d) 4. all of the above

Correct Answer : 3

444. Software quality managers are responsible for ____.

- a) 1. Quality assurance
- b) 2. Quality planning
- c) 3. Quality control
- d) 4. All of the above

Correct Answer : 4

445. As per SEI CMM organizations which do not have any KPAs present & stable are considered at

- a) 1. Level 1
- b) 2. Level 2
- c) 3. Level 3
- d) 4. Level 4

Correct Answer : 1

446.. Which of the following are aims of UML?

- a. To model system using OO concepts
- b. To provide a process for software development
- c. To support small-scale and large-scale analysis and design
- d. To provide an insight into implementation mechanism

- a) 1. a, c
- b) 2. a, b
- c) 3. a, b, d
- d) 4. a, c, d

Correct Answer : 4

447.Q2. In which of the following phases of use-case driven process do you think use cases have a role?

- a. requirement capture
- b. analysis
- c. design
- d. implementation
- e. test

- a) 1. a, b, c
- b) 2. a, b, c, d
- c) 3. b, d
- d) 4. a, b, c, e

Correct Answer : 4

448. If you are finding hard to identify the name of class and to write definition for it. What thing you should do?

- a) 1. ignore class completely
- b) 2. do more analysis to get a better understanding of what is involved in the class
- c) 3. write a definition for the class even if it is not very good
- d) 4. make it a friend class of some other main class

Correct Answer : 2

449. Which of the following are possible actors?

- a. data inputter



- b. GUI component
- c. Another system
- d. A printer
- a) 1. a, b, c
- b) 2. a, b, c, d
- c) 3. a, b, d
- d) 4. a, c

Correct Answer : 3

450. UML can be used as a way to represent only OO software systems

- a) **Correct Answer : F**

451. Use cases can be included in any type of collaboration diagrams.

- a) **Correct Answer : F**

452. collaboration diagram represents

- a) 1. organization of objects
- b) 2. messages on time scale
- c) 3. conceptual design
- d) 4. set of actions

- e) **Correct Answer : 1**

453. In OOD primary abstraction mechanism is _____

- a) 1. function
- b) 2. class
- c) 3. object
- d) 4. hierarchy

- e) **Correct Answer : 2**

454. prototyping model _____

- a) 1. delivers a system in a series of versions
- b) 2. builds a bridge between user and developer
- c) 3. uses experimental software to better understand user requirements
- d) 4. works with encapsulation and inheritance to simplify flow of control

- e) **Correct Answer : 3**

455. storage management is not a part of version management

- a) **Correct Answer : F**

456. Q14. data flow diagrams are part of design phase of SDLC

- a) **Correct Answer : T**

457. Which of the following is reason of project failure?

- a) 1. finite resources
- b) 2. inaccurate estimates of cost and time
- c) 3. others are competing to do the job cheaper and faster
- d) 4. none of the above

- e) **Correct Answer : 2**

458. What manifests in the patterns of choices made among alternative ways of expressing an algorithm is

- a) 1. a data flow diagram
- b) 2. coding style
- c) 3. a data dictionary
- d) 4. a flow chart

- e) **Correct Answer : 4**

f)

459. _____ is method for estimating software

- a) 1. COCOMO

- b) 2. function point analysis
- c) 3. use case estimation
- d) 4. all of the above
- e) **Correct Answer : 4**
- f)

460. pickup odd one out of the following

- a) 1. component assembly model
- b) 2. spiral model
- c) 3. incremental model
- d) 4. iterative model
- e) **Correct Answer : 1**
- f)

461. which of the following types of test plans is most likely to arise from requirement specification process?

- a) 1. system integration testing plan
- b) 2. acceptance test plan
- c) 3. sub-system integration test plan
- d) 4. module test plan
- e) **Correct Answer : 2**
- f)

462. Parts of design principle are

- a) 1. correctness, robustness, efficiency, flexibility, understandable
- b) 2. correctness, robustness, efficiency, flexibility, reusability
- c) 3. flexibility, correctness, robustness, efficiency, standard
- d) 4. flexibility, correctness, robustness, efficiency, security

Correct Answer : 2

463. largest time is spent on which of the software development phase?

- a) 1. testing
- b) 2. enhancement
- c) 3. bug fixing
- d) 4. analysis and design

Correct Answer : 2

464. Which of the following can be a reason for project failure?

- a) 1. Finite resources
- b) 2. Inaccurate estimates of cost & time
- c) 3. Others competing to do the job cheaper & faster.
- d) 4. None of the above

Correct Answer : 2

465. Pick the odd one out

- a) 1. Component assembly model
- b) 2. Spiral Model
- c) 3. Incremental Model
- d) 4. Iterative Model
- e) **Correct Answer : 1**
- f)



466. Software Engineering is concerned with ____.

- 1. process
- 2. methods
- 3. tools
- 4. all of the above

Correct Answer : 4

467. An approved feasibility study is a deliverable out of

- a) 1. Systems design
- b) 2. Preliminary investigation
- c) 3. Systems development
- d) 4. Systems analysis

e) **Correct Answer : 2**

468. Checklists, grid charts, and decision tables are all tools used in the _____ step

- a) 1. preliminary investigation
- b) 2. systems analysis
- c) 3. systems development
- d) 4. systems implementation

e) **Correct Answer : 2**

f)

469. The present system is studied in depth during the _____ phase of the systems life cycle.

- a) 1. preliminary investigation
- b) 2. systems analysis
- c) 3. systems design
- d) 4. systems development

e) **Correct Answer : 2**

470. RAD Model is high speed implementation of

- a) 1. Waterfall Model
- b) 2. Spiral Model
- c) 3. Prototyping model
- d) 4. Component Assembly model

Correct Answer : 1

471. Arrange the following Requirements subphases in the correct order a. Documentation b. Analysis c. Validation d. Elicitation

- a) 1. a, b, c, d
- b) 2. d, b, a, c
- c) 3. d, c, a, b
- d) 4. b, a, d c

Correct Answer : 2

472. External Entities in a Context Diagram may be A) People B) Other Software Systems C) Hardware D) Databases

- a) 1. Only A & D
- b) 2. Only B & C
- c) 3. Only A, B & D
- d) 4. A, B, C & D

e) **Correct Answer : 4**

473. Example of a Semantic Data model is

- a) 1. data flow diagram
- b) 2. Context Diagram
- c) 3. Entity Relationship Diagram
- d) 4. all of the above
- e) **Correct Answer : 3**

474. Automated CASE tools like PSL/PSA do not help in

- a) 1. Requirements Documentation
- b) 2. Requirements Validation
- c) 3. Requirements Analysis
- d) 4. Requirements Elicitation
- e) **Correct Answer : 4**

475. A system developed to give end users a concrete impression of the system capabilities is called

- a) 1. Semantics
- b) 2. model
- c) 3. prototype
- d) 4. abstraction
- e) **Correct Answer : 3**

476. The requirement engineering process has the following stages, Except

- a) 1. Feasibility study
- b) 2. Requirement analysis
- c) 3. Implementation
- d) 4. Requirement definition
- e) **Correct Answer : 3**

477. Notations used to specify the external characteristics, architectural structure, and processing details of a software system include I. Data Flow Diagrams II. HIPO diagrams III. Structure Charts

- a) 1. I and II Only
- b) 2. III Only
- c) 3. I, II and III
- d) 4. None of the above
- e) **Correct Answer : 3**

478. Planning the modular program structure & control relationships between modules is called

- a) 1. Architectural Design
- b) 2. High Level Design
- c) 3. System Design
- d) 4. all of the above
- e) **Correct Answer : 4**

479. Conception & planning out of externally observable characteristics of a software is called

- a) 1. External Design
- b) 2. User Interface Design
- c) 3. Both a and b options
- d) 4. None of the above



e) **Correct Answer : 3**

480. Concept of Abstraction is used in

- a) 1. Requirements phase
- b) 2. Design Phase
- c) 3. Testing Phase
- d) 4. all of the above

e) **Correct Answer : 4**

481. Providing a logical reference to the data object without concern for the underlying representation is

- a) 1. Procedural Abstraction
- b) 2. Data Abstraction
- c) 3. Control Abstraction
- d) 4. None of the above

e) **Correct Answer : 2**

482. The number of subordinate modules controlled by a module is called its

- a) 1. control range
- b) 2. fan out
- c) 3. fan in
- d) 4. width

e) **Correct Answer : 2**

483. If two modules pass a data structure across their interface they exhibit

- a) 1. Stamp Coupling
- b) 2. Data Coupling
- c) 3. Content Coupling
- d) 4. Control Coupling

e) **Correct Answer : 1**

484. Use of global data areas or global variables may lead to

- a) 1. Stamp Coupling
- b) 2. Common Coupling
- c) 3. Content Coupling
- d) 4. Control Coupling

e) **Correct Answer : 2**

485. The strength of relationship between which of the following elements of a module is examined to evaluate module cohesion

- a) 1. function declarations, function definitions & calls
- b) 2. variable declarations
- c) 3. data definitions
- d) 4. all of the above

e) **Correct Answer : 4**

486. The graphical tool commonly used to represent the system architecture is called

- a) 1. Context Diagram
- b) 2. Structure Chart
- c) 3. Architectural Plan
- d) 4. Event Table

e) **Correct Answer : 2**

487. The method of deriving the structure chart from the DFD is called

- a) 1. Factoring
- b) 2. Factor Analysis
- c) 3. Transform Analysis
- d) 4. all of the above

e) **Correct Answer : 3**

488. Which of the following is true about structure chart notations?

- a) 1. There should be only one module at the top
- b) 2. There should be at the most one control arrow between two modules
- c) 3. The sequence or order of tasks is not represented
- d) 4. All of the above

e) **Correct Answer : 4**

f)

489. Using _____ a programmer can detail the logic of the program

- a) 1. pseudocode
- b) 2. software
- c) 3. context diagram
- d) 4. data flow diagram

e) **Correct Answer : 1**

490. Typographical errors and/or incorrect use of the programming language is referred to as

- a) 1. logic errors
- b) 2. syntax errors
- c) 3. run time errors
- d) 4. A bug

e) **Correct Answer : 2**

491. _____ is the process of locating and eliminating program errors.

- a) 1. editing
- b) 2. correcting
- c) 3. debugging
- d) 4. testing

e) **Correct Answer : 3**

492. Changes made to the software to accommodate changes to its environment is called

- a) 1. perfective maintenance
- b) 2. regressive maintenance
- c) 3. adaptive maintenance
- d) 4. corrective maintenance

e) **Correct Answer : 3**

f) Your Answer :

493. Changes made to the software to extend it beyond its original functionality is called

- a) 1. perfective maintenance
- b) 2. regressive maintenance
- c) 3. adaptive maintenance
- d) 4. corrective maintenance

e) **Correct Answer : 1**

f) Your Answer :

494. Major changes made to software after long periods is also called software reengineering or

- a) 1. perfective maintenance
- b) 2. regressive maintenance
- c) 3. adaptive maintenance
- d) 4. corrective maintenance

e) **Correct Answer : 2**

f) Your Answer :

495. The value of COCOMO cost driver attribute for lower than average Reliability requirement will be

- a) 1. Greater than 1
- b) 2. Equal to 1
- c) 3. Less than 1
- d) 4. None of these

e) **Correct Answer : 3**

496. The critical path of PERT/CPM chart cannot be

- a) 1. the path with the longest duration
- b) 2. more than one unique path
- c) 3. path on which any delays are allowed
- d) 4. path with same earliest and latest starts for all activities

e) **Correct Answer : 3**

497. The total float for an activity is

- a) 1. the total duration of the activity
- b) 2. the difference between the earliest finish time and earliest start time
- c) 3. the difference between the latest finish time and the earliest finish time
- d) 4. the difference between the latest finish time and the earliest start time

e) **Correct Answer : 3**

498. required to finish the project can be estimated by considering the _____ path in the activity graph

- a) 1. Shortest
- b) 2. Longest
- c) 3. Average
- d) 4. SPT

e) **Correct Answer : 2**

499. Which of the following is true as per Putnam model

- a) 1. Staffing Pattern peaks at Coding & Unit testing
- b) 2. Schedule compression increases effort in proportion to fourth power
- c) 3. Expanding the schedule gives extreme saving in effort
- d) 4. all of the above

e) **Correct Answer : 4**

500. _____ ensures that a set procedure is followed to make any changes to the software



- a) 1. Configuration Identification
- b) 2. Configuration Control
- c) 3. Baselining
- d) 4. all of the above
- e) **Correct Answer : 2**

501. Configuration Management is

- a) 1. framework activity
- b) 2. umbrella activity
- c) 3. one time activity
- d) 4. None of the above
- e) **Correct Answer : 3**

503. Your Answer : The Software Life Cycle covers activities from

- a) 1. Feasibility Study to Installation
- b) 2. Requirements Phase to Testing
- c) 3. Requirements Phase to Maintenance
- d) 4. Project Initiation to Software Retirement
- e) **Correct Answer : 4**

504. . The Software Development Life Cycle covers activities from

- a) 1. Feasibility Study to Installation
- b) 2. Requirements Phase to Testing
- c) 3. Requirements Phase to Maintenance
- d) 4. Project Initiation to Software Retirement
- e) **Correct Answer : 2**

505. Which of the following activities is not considered as "Umbrella Activity"

- a) 1. S/W Quality assurance
- b) 2. Software Design
- c) 3. S/W configuration management
- d) 4. S/W Project Monitoring & Control
- e) **Correct Answer : 2**

506. . Any activity designed to keep programs in working condition, error free, and up-to-date, is referred to as _____

- a) 1. maintenance
- b) 2. testing
- c) 3. debugging
- d) 4. coding
- e) **Correct Answer : 1**

507. Checklists, grid charts, and decision tables are all tools used in the _____ step

- a) 1. preliminary investigation
- b) 2. systems analysis
- c) 3. systems development
- d) 4. systems implementation
- e) **Correct Answer : 2**

508. Prototype may be used for

- a) 1. Risk Reduction



- b) 2. Requirements Elicitation
- c) 3. User Interface Design
- d) 4. all of the above
- e) **Correct Answer : 4**

509. Which of the following is not true about Component Assembly Model

- a) 1. It is similar to the Spiral Model
- b) 2. The technical framework for this model is provided by object technologies
- c) 3. Candidate classes are extracted from class library or developed
- d) 4. Its productivity is low
- e) **Correct Answer : 4**

510. During Requirements Phase recording interface requirements of a software system does not include which of the following interfaces

- a) 1. User Interfaces
- b) 2. Software Interfaces
- c) 3. Hardware Interfaces
- d) 4. Module Interfaces
- e) **Correct Answer : 4**

511. E-R diagrams are used in

- a) 1. Database design
- b) 2. Data Dictionary compilation
- c) 3. Architectural design
- d) 4. Functional Design
- e) **Correct Answer : 1**

512. The flow of data within a system is described by a _____

- a) 1. data flow diagram
- b) 2. top-down analysis
- c) 3. system flowchart
- d) 4. decision table
- e) **Correct Answer : 1**

513. A system developed to give end users a concrete impression of the system capabilities is called

- a) 1. Semantics
- b) 2. model
- c) 3. prototype
- d) 4. abstraction
- e) **Correct Answer : 3**

514. Notations used to specify the external characteristics, architectural structure, and processing details of a software system include I. Data Flow Diagrams II. HIPO diagrams III. Structure Charts

- a) 1. I and II Only
- b) 2. III Only
- c) 3. I, II and III
- d) 4. None of the above
- e) **Correct Answer : 3**

515. Formal specification techniques are based on

- a) 1. set theory
- b) 2. logic
- c) 3. sequence
- d) 4. all of the above
- e) **Correct Answer : 4**

516. Using the name of a sequence of instructions in place of the sequence of instructions is an example of

- a) 1. Procedural Abstraction
- b) 2. Data Abstraction
- c) 3. Control Abstraction
- d) 4. None of the above
- e) **Correct Answer : 1**

517. Providing a logical reference to the data object without concern for the underlying representation is

- a) 1. Procedural Abstraction
- b) 2. Data Abstraction
- c) 3. Control Abstraction
- d) 4. None of the above
- e) **Correct Answer : 2**

518. A way of indicating the desired effect without establishing the actual mechanism

- a) 1. Procedural Abstraction
- b) 2. Data Abstraction
- c) 3. Control Abstraction
- d) 4. None of the above
- e) **Correct Answer : 3**

519. Designers should aim to produce strongly _____ and weakly _____ designs

- a) 1. coupled, functional
- b) 2. maintainable, cohesive
- c) 3. cohesive, coupled
- d) 4. coupled, cohesive
- e) **Correct Answer : 3**

520. If two modules pass a data structure across their interface they exhibit

- a) 1. Stamp Coupling
- b) 2. Data Coupling
- c) 3. Content Coupling
- d) 4. Control Coupling
- e) **Correct Answer : 1**

521. The strength of relationship between which of the following elements of a module is examined to evaluate module cohesion

- a) 1. function declarations, function definitions & calls
- b) 2. variable declarations
- c) 3. data definitions



- d) 4. all of the above
- e) **Correct Answer : 4**

522.. A module whose all elements exhibit relationship which involves both data and control flow is said to be _____ cohesive

- a) 1. Sequentially
- b) 2. Communicationally
- c) 3. Temporally
- d) 4. Procedurally
- e) **Correct Answer : 1**

523.The afferent branch of the DFD ends at the

- a) 1. Most Abstract Input
- b) 2. Most Abstract Output
- c) 3. middle of the central transform
- d) 4. all of the above
- e) **Correct Answer : 1**

524.Which of the following is not true about a flow chart?

- a) 1. It shows the flow of control of a program
- b) 2. It is a tool for detailed design
- c) 3. Data interchange is not represented
- d) 4. It clearly separates various modules of the software
- e) **Correct Answer : 4**

525.I. Object-oriented software development creates better programs but is less efficient to use II. Object-oriented software development is more efficient than traditional methods. III. OOP is a process that organizes a program into objects that contain both data and the processing operations necessary to perform a task

- a) 1. I and II are correct
- b) 2. II and III are correct
- c) 3. I and III are correct
- d) 4. I, II and III are correct
- e) **Correct Answer : 3**

526.Typographical errors and/or incorrect use of the programming language is referred to as

- a) 1. logic errors
- b) 2. syntax errors
- c) 3. run time errors
- d) 4. A bug
- e) **Correct Answer : 2**

527.The if-then-else construct is an example of the

- a) 1. sequencing
- b) 2. selection
- c) 3. iteration
- d) 4. all of the above
- e) **Correct Answer : 2**



528. Proper program layout by proper usage of proper use of indentation, blank spaces, blank lines, parentheses improves

- a) 1. Efficiency of the program
- b) 2. size of the program
- c) 3. maintainability of the program
- d) 4. reliability of the program
- e) **Correct Answer : 3**

529.. Static verification & validation is applied to

- a) 1. SRS
- b) 2. Design
- c) 3. Code
- d) 4. all of the above
- e) **Correct Answer : 4**

530. Static testing involves

- a) 1. Code Analysis
- b) 2. Structural Analysis
- c) 3. Data Flow Analysis
- d) 4. all of the above
- e) **Correct Answer : 4**

531. Statistical Testing is used for

- a) 1. For statistical softwares only
- b) 2. Only uncovering defects
- c) 3. Reliability estimation
- d) 4. efficiency estimation
- e) **Correct Answer : 3**

532. Which of the following is NOT true about software testing

- a) 1. It follows a bottom up approach
- b) 2. Testing is planned after the coding phase
- c) 3. Complete testing is not possible
- d) 4. Testing only establishes presence of defects
- e) **Correct Answer : 2**

533. Black box testing is more useful in locating

- a) 1. Functional Errors
- b) 2. Performance Errors
- c) 3. Interface Errors
- d) 4. All of these options

Correct Answer : 4

534. Testing of software falls after _____ stage.

- a) 1. Designing
- b) 2. Implementation
- c) 3. Deployment
- d) 4. Coding

Correct Answer : 4

535. Testing strategies can be _____.

- 1. Top – down testing, Bottom – up testing

- 2. Thread testing, Stress testing
- 3. Back – to – back testing
- 4. all of above

Correct Answer : 4

536. _____ exercises the system beyond its maximum design load

- a) 1. Thread testing
- b) 2. Stress Testing
- c) 3. Back to back testing
- d) 4. all of the above
- e) **Correct Answer : 2**

537. Presenting the same tests to different versions of the system and compare outputs is called

- a) 1. Thread testing
- b) 2. Stress Testing
- c) 3. Back to back testing
- d) 4. all of the above
- e) **Correct Answer : 3**

538. Testing done with real data is called _____.

- a) 1. Data testing
- b) 2. Unified testing
- c) 3. Alpha testing
- d) 4. Beta testing
- e) **Correct Answer : 4**

539. The following are the testing strategies except

- a) 1. Top-down testing
- b) 2. Thread testing
- c) 3. Stress testing
- d) 4. Verification testing
- e) **Correct Answer : 3**

540. Changes made to the software to accommodate changes to its environment is called

- a) 1. perfective maintainence
- b) 2. regressive maintainence
- c) 3. adaptive maintainence
- d) 4. corrective maintainence
- e) **Correct Answer : 3**

541. Changes made to the software to extend it beyond its original functionality is called

- a) 1. perfective maintainence
- b) 2. regressive maintainence
- c) 3. adaptive maintainence
- d) 4. corrective maintainence
- e) **Correct Answer : 1**

542. Major changes made to software after long periods is also called software reengineering or

- a) 1. perfective maintainence
- b) 2. regressive maintainence
- c) 3. adaptive maintainence
- d) 4. corrective maintainence

e) **Correct Answer : 2**

543. Which of the following is not a part of Project Plan?

- a) 1. Risk Management Plan
- b) 2. Personnel Plan
- c) 3. Project Monitoring Plan
- d) 4. Software Architecture Planning

e) **Correct Answer : 4**

544. An example of an Empirical Software estimation technique is

- a) 1. COCOMO
- b) 2. FPA
- c) 3. Delphi
- d) 4. Halstead's Software Science

e) **Correct Answer : 3**

545. The Lines of Code (LOC) size do not include

- a) 1. Compiler Directives
- b) 2. Declarations
- c) 3. Comments
- d) 4. all of the above

e) **Correct Answer : 3**

546. In COCOMO terminology a project with software being strongly coupled to complex hardware & stringent regulations on operating procedures is categorised as

- a) 1. Organic
- b) 2. Semidetached
- c) 3. Embedded
- d) 4. Application

e) **Correct Answer : 3**

547. The value of COCOMO cost driver attribute for lower than average Reliability requirement will be

- a) 1. Greater than 1
- b) 2. Equal to 1
- c) 3. Less than 1
- d) 4. None of these

e) **Correct Answer : 3**

548. The critical path of PERT/CPM chart cannot be

- a) 1. the path with the longest duration
- b) 2. more than one unique path
- c) 3. path on which any delays are allowed
- d) 4. path with same earliest and latest starts for all activities

e) **Correct Answer : 3**

549. ____ and ____ are graphical notations which are used to illustrate the project schedule.

- a) 1. Bar chart and DFD
- b) 2. ERD and Bar chart
- c) 3. Class diagram and activity networks
- d) 4. Bar chart and activity networks

e) **Correct Answer : 4**

550. The minimum time required to finish the project can be estimated by considering the _____ path in the activity graph

- a) 1. Shortest
- b) 2. Longest
- c) 3. Average
- d) 4. SPT

e) **Correct Answer : 2**

551. PERT/CPM cannot be used for

- a) 1. Scheduling of projects
- b) 2. Monitoring & Control of projects
- c) 3. Optimising Resource Utilization
- d) 4. Quality control of products

e) **Correct Answer : 4**

552. Which of the following is true as per Putnam model

- a) 1. Staffing Pattern peaks at Coding & Unit testing
- b) 2. Schedule compression increases effort in proportion to fourth power
- c) 3. Expanding the schedule gives extreme saving in effort
- d) 4. all of the above

e) **Correct Answer : 4**

553. Risk of unrealistic estimates & schedules can be overcome by

- a) 1. Using objective methods of estimation rather than judgemental methods
- b) 2. Developing a culture of software reuse
- c) 3. Performing multisource estimations
- d) 4. all of the above

e) **Correct Answer : 4**

554. Configuration Management is

- a) 1. framework activity
- b) 2. umbrella activity
- c) 3. one time activity
- d) 4. None of the above

e) **Correct Answer : 3**

555. Repeatability level as per CMM model is

- a) 1. Level 1
- b) 2. Level 2
- c) 3. Level 3
- d) 4. Level 4

e) **Correct Answer : 2**

556. The collection of computer programs, procedures, rules and associated documents and data is called _____

- a) 1. Software
- b) 2. Hardware
- c) 3. Both
- d) 4. None

e) **Correct Answer : 1**

557. A context diagram contains

- a) 1. Only one process
- b) 2. More than one process
- c) 3. At least one process
- d) 4. None

e) **Correct Answer : 1**

558. The spiral model is both suitable for

- a) 1. Development type projects
- b) 2. Enhancement type project
- c) 3. Both
- d) 4. None

e) **Correct Answer : 3**

559. CASE is expanded as

- a) 1. Computer Analysis Software Engineering
- b) 2. Computer Aided Software Engineering
- c) 3. Computer Aided System Engineering
- d) 4. Computer Analysis System Engineering

e) **Correct Answer : 2**

560. Three major factors of software engineering are

- a) 1. Cost, Correctness, Reliability
- b) 2. Cost, Schedule, Reliability
- c) 3. Cost, Quality, Correctness
- d) 4. Cost, Portability, Reliability

e) **Correct Answer : 2**

561. Data flow can take place between

- a) Process to Process
- b) File to File
- c) Process to File
- d) External Entity to Process

- a) 1. a, b, c
- b) 2. b, c, d
- c) 3. a, c, d
- d) 4. a, b, d

e) **Correct Answer : 3**

562. Match the level testing can work on

1) Acceptance Testing 2) System Testing 3) Integration Testing 4) Unit Testing

a) Client Needs b) Requirements c) Design d) Code

- a) 1. 1-a, 2-b, 3-c, 4-d
- b) 2. 1-d, 2-b, 3-c, 4-a
- c) 3. 1-a, 2-b, 3-d, 4-c
- d) 4. 1-a, 2-c, 3-b, 4-d

e) **Correct Answer : 1**

563. The first step in the project planning is:

A: Size of the product

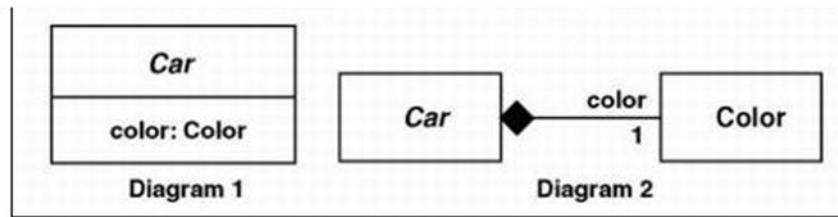
B: Select team organizational mode

C: Determine the Project constraints

D: Establish objectives and scope

564.

A:



1:An aggregation, 2: A composition.

B:1:An attribute, 2: An aggregation.

C:1:An aggregation, 2: An attribute.

D:1:An attribute. 2: A composition.

565. Phase containment of errors means.

A: Detect errors to the closest point of errors.

B: Stop errors during software projects deployment.

C: Stop errors during software projects coding

D: None of the above.

566. The most commonly used model in today's development is

A: Waterfall model

B: Spiral model

C: Iterative waterfall model

D: None of the above.

567. What is "Customer must have at least a Pentium machine to access this software" in context of Software Requirements,

A: Assumption

B: Objective

C: Business Problem

D: All of the above

568. For a Leave Application System, an "Employee" can use the system to request for leaves and a "Manager can approve/reject the leaves. The data will be stored within a "Leave database" as part of this system. In this scenario, identify the valid actors from the following for this system.

(i)Employee

(ii)Manager

(iii)Leave Database

(iv)Leave Application System

Choice A: None of the above

Choice B: i, ii

Choice C: iii, iv

Choice D: All of the above

661. A timing constraint placed on the system or the use of a specific language during development, is an example of

A: Functional requirements

B: Non functional requirements

C: Requirements definition

D: None of the above

What is a Requirement definition?

A: What software provides.



B: Requirements in SRS

C: What customer wants?

D: All of the above

662. Which of the following is a tool in design phase?

A: Abstraction

B: Refinement

C: Information hiding

D: All the above

661. The data flow diagram

A: Depicts relationships between data objects depicts relationships between data objects

B: Depicts functions that transform the data flow

C: Indicates how data are transformed by the system

D: Both b and c

662. An approved feasibility study is a deliverable out of

A: Systems design

B: Preliminary investigation

C: Systems development

D: Systems analysis

661. _____ provides the maximum number of test cases that will be required to guarantee that every statement in program has been executed at least once.

A: Independent Program paths

B: Cyclomatic complexity

C: Graph Matrices

D: None of the above

662. Content testing uncovers

A: Syntactic errors

B: Semantic errors

C: Structural errors

D: All of the above

663. Which of these are standards for assessing software processes?

A: SEI R

B: SPICE

C: ISO 9001

D: Both b and c

664. Methods of Project Monitoring are

A: time sheet

B: Earned value method

C: Design Constraints

D: Both a & b

666. Risk projection attempts to rate each risk in two ways

A: Likelihood and cost

B: Likelihood and impact

C: Likelihood and consequences

D: Likelihood and exposure



667. Effective risk management plan needs to address which of these issues?

- A: risk avoidance
- B: risk monitoring
- C: contingency planning
- D: all of the above**

668. To quantify a risk we need to do the following

- A: Determine the possibility of risk happening
- B: Determine consequences of the problem associated with that risk.
- C: Both a and b.**
- D: None of the above.

669. Change control process is done in a software project during

670. A: requirements

671. Deliverable for a software Project is

- A: Source Code
- B: Design Documents
- C: Requirement Documents and Test Plans
- D: All of the above**

672. Scoping is done during,

- A: Proposal Stage
- B: Requirements gathering stage**
- C: Design Stage
- D: Coding Stage

673. A software engineer is measuring the quality of a software system. He is concerned with the 'reliability' and the 'validity' of his measurements. Which of the following is true?

- A: Reliability refers to the extent to which the measurement represents the actual quality of the system and validity refers to the consistency of the quality measurements
- B: Reliability refers to the consistency of her quality measurements and validity refers to the extent to which the measurement represents the actual quality of the system.**
- C: Reliability refers to the accuracy of her quality measurements and validity refers to the extent to which the measurement follows a quality standard.
- D: Reliability refers to the concurrency of her quality measurements and validity refers to the extent to which the measurements are consistent with established norms.

674. Quality attributes are the overall factors that affect

- A: run-time behavior
- B: system design
- C: user experience
- D: All of the above**

675. Which of the following is reason of project failure?

- A: finite resources
- B: inaccurate estimates of cost and time
- C: others are competing to do the job cheaper and faster
- D: none of the above

676. Parts of design principle are



- A: correctness, robustness, efficiency, flexibility, understandable
- B: correctness, robustness, efficiency, flexibility, reusability
- C: flexibility, correctness, robustness, efficiency, standard
- D: flexibility, correctness, robustness, efficiency, security

677. Testing is a

A: process of executing a program with intent of finding an error

B: process of removing error

678. C: process of testing software

679. D: all of the above

680. Black box testing checks the following errors

A: incorrect function

B: Interface errors

C: Both a & b

D: None of the above

681. A method of estimating the amount of functionality required for a project is

A: WBS Estimation

B: UCP Estimation

C: FP Estimation

D: COCOMO estimation

682. Scheduling begins with _____

A: Risk identification

B: Process decomposition

C: FP Estimation

D: COCOMO estimation

683. Aggregation represents

A: is_a relationship

684. B: part_of relationship

685. C: composed_of relationship

D: None of above

686. Modules X and Y operate on the same input and output data. The cohesion is said to be:

A: Sequential

B: Communicational

C: Procedural

D: Logical

687. Estimates are made in a project primarily on

A: size

B: Cost

C: Both a and b.

D: None of the above

688. SPMP document is made at the end of

A: project planning

B: project monitoring

C: project control

D: None of the above

689. While gathering the requirements on OO way (using RUP UML), the very first thing we should do it
690. A: Start gathering functional requirements
691. B: List down all the Users of the System (called as Actors)
- C: Start gathering non-functional requirements
- D: Create Test plan
692. What is the solution to "Yes-But Syndrome" in requirements gathering?
- A: Improve technical skills
- B: Seek customer feedback early**
- C: Learn a tool for requirements
- D: None of the above
693. Which of the following statements is true regarding scenarios?
- A: Scenarios are instances of a use case.
- B: Scenarios are generalizations of many use cases.
- C: A use case is an instance of a scenario.
- D: None of the above
694. Which of the following is true about a Build?
- A: A Build represents an operational version of a system or a part of the system that demonstrates a subset of the capabilities provided in the final product.
- B: A Build constitutes an integral part of the iterative development lifecycle and provides review points.
- C: Each Build is placed under configuration control in case there is a need to roll back to an earlier version when added functionality causes breakages or when there is otherwise some form of compromised Build integrity.
- D: All of the above**
695. Reliability in a software system can be achieved using the following strategies, EXCEPT
1. Fault avoidance
 2. Fault tolerance
 3. Fault detection
 4. Fault rectification
- Correct Answer : 3**
696. An approved feasibility study is a deliverable out of
1. Systems design
 2. Preliminary investigation
 3. Systems development
 4. Systems analysis
- Correct Answer : 2**
697. Any activity designed to keep programs in working condition, error free, and up-to-date, is referred to as _____
1. maintenance
 2. testing
 3. debugging
 4. coding
- Correct Answer : 1**
698. Checklists, grid charts, and decision tables are all tools used in the _____ step
1. preliminary investigation
 2. systems analysis
 3. systems development



4. systems implementation

Correct Answer : 2

699. During the _____ phase, the application is verified against the requirements

1. Analysis
2. Design
3. Testing
4. Implementation

Correct Answer : 3

700. Prototype may be used for

1. Risk Reduction
2. Requirements Elicitation
3. User Interface Design
4. all of the above

Correct Answer : 4

701. During the _____ phase of the systems life cycle, the new hardware and software are acquired and tested

1. design
2. development
3. implementation
4. maintenance

Correct Answer : 3

702. DFD gives idea about flow of _____ & flowchart gives idea of the flow of _____

1. processes, decisions
2. control, data
3. logic, control
4. data, control

Correct Answer : 4

703. Example of a Semantic Data model is

1. data flow diagram
2. Context Diagram
3. Entity Relationship Diagram
4. all of the above

Correct Answer : 3

704. A system developed to give end users a concrete impression of the system capabilities is called

1. Semantics
2. model
3. prototype
4. abstraction

Correct Answer : 3

705. The requirement engineering process has the following stages, Except

1. Feasibility study
2. Requirement analysis
3. Implementation
4. Requirement definition

Correct Answer : 3

706. Planning the solution to a programming problem using a structured technique is called program

1. coding
2. compiling
3. moduling
4. design

Correct Answer : 4

707. Conception & planning out of externally observable characteristics of a software is called

1. External Design
2. User Interface Design
3. Both a and b options
4. None of the above

Correct Answer : 3

708. The afferent branch of the DFD ends at the

1. Most Abstract Input
2. Most Abstract Output
3. middle of the central transform
4. all of the above

Correct Answer : 1

709. Static verification of code is not likely to reveal

1. logic errors
2. syntax errors
3. performance errors
4. coding standard violations

Correct Answer : 3

710. Which of the following is NOT true with regard to Testing & Debugging

1. Testing includes debugging
2. Debugging includes retesting
3. Testing only establishes presence of defects
4. Debugging repairs the program defects

Correct Answer : 1

711. Which factor among the following has least effect on the testability of a software ?

1. Decomposability
2. Efficiency
3. Understandability
4. Observability

Correct Answer : 2

712. Identification of inputs which cause anomalous behavior in the outputs indicating the existence of defects is

1. Static Testing
2. White Box Testing
3. Black Box Testing
4. Interface testing

Correct Answer : 3

713. Purely black box testing would be used at which of the following levels?

1. Unit testing



2. Module testing
3. Integration Testing
4. Acceptance Testing

Correct Answer : 4

714. A Test case includes

1. Input
2. Expected output
3. information of function under test
4. All of these options

Correct Answer : 4

715. In unit testing which of the following is the strongest testing strategy?

1. Statement coverage
2. Branch Coverage
3. Condition Coverage
4. Path coverage

Correct Answer : 4

716. Selection of test paths according to definition & usage of different variables in the program is called

1. Path coverage testing
2. Condition Coverage testing
3. Data Flow Testing
4. Branch Coverage Testing

Correct Answer : 3

717. _____ exercises the system beyond its maximum design load

1. Thread testing
2. Stress Testing
3. Back to back testing
4. all of the above

Correct Answer : 2

718. Compared to small team projects large team projects are

1. more sensitive to programmer ability
2. less sensitive to programmer ability
3. not sensitive to programmer ability
4. None of these

Correct Answer : 2

719. COCOMO is categorized as a _____ estimation technique

1. Heuristic
2. Empirical
3. Analytical
4. None of the above

Correct Answer : 1

720. In COCOMO terminology a project with software being strongly coupled to complex hardware & stringent regulations on operating procedures is categorised as

1. Organic
2. Semidetached
3. Embedded



4. Application

Correct Answer : 3

721. Which version of COCOMO develops estimates for large projects as sum of estimates of its various subsystems by considering the differences in the complexities of its various subsystems

1. Basic COCOMO
2. Intermediate COCOMO
3. Complete COCOMO
4. None of the above

Correct Answer : 3

722. Which of the following is true as per Putnam model

1. Staffing Pattern peaks at Coding & Unit testing
2. Schedule compression increases effort in proportion to fourth power
3. Expanding the schedule gives extreme saving in effort
4. all of the above

Correct Answer : 4

723. Risk Assessment Table is based on categorization by

1. Risk Components
2. Risk Impact
3. Both a and b options
4. None of the above

Correct Answer : 3

724. Risks arising out of frequent change requests are best mitigated by

1. User characterization
2. Strong SCM
3. Multisource estimations
4. Prescheduling key personnel

Correct Answer : 2

725. Requirement phase is usually done by

1. System Analyst
2. System Administrator
3. System Engineer
4. All

Correct Answer : 1

726. Productivity can measure from the relationship

1. Productivity=KLOC/person-month
2. Productivity=KLOC/defects
3. Productivity=KLOC/LOC
4. Productivity=KLOC*person-month

Correct Answer : 1

727. The goal of coding is

1. To reduce the cost of testing
2. To reduce the cost of maintenance
3. Both a & b
4. None



Correct Answer : 3

728.CASE is expanded as

1. Computer Analysis Software Engineering
2. Computer Aided Software Engineering
3. Computer Aided System Engineering
4. Computer Analysis System Engineering

Correct Answer : 2

729.Structural approach is also known as

1. Glass box testing
2. Black box testing
3. Input box testing
4. Output box testing

Correct Answer : 1

Your Answer :

730.Three major factor of software engineering are

1. Cost , Correctness , Reliability
2. Cost , Schedule , Reliability
3. Cost , Quality ,Correctness
4. Cost , Portability , Reliability

Correct Answer : 2

731.. Ability of a software to perform stated function under stated condition for a stated period of time

1. Efficiency
2. Robustness
3. Reliability
4. Correctness

Correct Answer : 3

732.The Software Life Cycle covers activities from

1. Feasibility Study to Installation
2. Requirements Phase to Testing
3. Requirements Phase to Maintenance
4. Project Initiation to Software Retirement

Correct Answer : 4

733.An approved feasibility study is a deliverable out of

1. Systems design
2. Preliminary investigation
3. Systems development
4. Systems analysis

Correct Answer : 2

734.The goal of _____ is to obtain a clear understanding of the system and its shortcomings and to determine opportunities for improvement

1. Feasibility study
2. systems analysis
3. systems definition
4. systems study

Correct Answer : 2

735. The SDLC Model most suitable for small projects with unclear requirements is but not many technical risks is

1. Spiral Model
2. Incremental Model
3. Waterfall Model
4. Prototyping Model

Correct Answer : 4

736. Prototype may be used for

1. Risk Reduction
2. Requirements Elicitation
3. User Interface Design
4. all of the above

Correct Answer : 4

737. _____ uses powerful development software and small, highly trained teams of programmers.

1. Prototyping
2. RAD
3. Coding
4. Modeling

Correct Answer : 2

738. Example of a Semantic Data model is

1. data flow diagram
2. Context Diagram
3. Entity Relationship Diagram
4. all of the above

Correct Answer : 3

739. Formal specification techniques are based on

1. set theory
2. logic
3. sequence
4. all of the above

Correct Answer : 4

740. Formal specification language consists of

1. syntax
2. semantics
3. set of relations
4. all of the above

Correct Answer : 4

:

741. Planning the solution to a programming problem using a structured technique is called program

1. coding
2. compiling
3. moduling
4. design

Correct Answer : 4

742.. The number & complexity of interconnections between two modules is an indicator of

1. Modularity
2. Cohesion
3. Coupling
4. Abstraction

Correct Answer : 3

743. Among the following types which is the most undesirable form of coupling

1. Stamp Coupling
2. Common Coupling
3. Content Coupling
4. Control Coupling

Correct Answer : 4

744. A module whose all elements exhibit relationship which involves both data and control flow is said to be _____ cohesive

1. Sequentially
2. Communicationally
3. Temporally
4. Procedurally

Correct Answer : 1

745. Function oriented design process consists of

1. Data Flow Design
2. Structural decomposition
3. Detailed Design
4. all of the above

Correct Answer : 4

746. Which of the following would NOT appear as a symbol on a flowchart?

1. data type
2. decision
3. input/output
4. processing

Correct Answer : 1

747. _____ involves modeling a system as a set of interacting functional units.

1. Object oriented decomposition
2. Procedural decomposition
3. Functional decomposition
4. None of the above

Correct Answer : 3

748. All of the following are control structures used in structured programming, EXCEPT

1. iteration
2. selection
3. sequence
4. goto

Correct Answer : 4

749. Proper program layout by proper usage of proper use of indentation, blank spaces, blank lines, parentheses improves

1. Efficiency of the program
2. size of the program
3. maintainability of the program
4. reliability of the program

Correct Answer : 3

750. Statistical Testing is used for

1. For statistical softwares only
2. Only uncovering defects
3. Reliability estimation
4. efficiency estimation

Correct Answer : 3

751. In _____, the tester can analyze the code and use knowledge about the structure of a component to derive test data

1. Black box
2. White box
3. Stress testing
4. None of the above

Correct Answer : 2

752. Test Data includes

1. Set of inputs
2. set of expected outputs
3. information of function under test
4. All of these options

Correct Answer : 1

753. A driver is a dummy version of the _____ module of the module under testing

1. superordinate
2. subordinate
3. coordinate
4. All of the above

Correct Answer : 1

754. Changes made to the software to accommodate changes to its environment is called

1. perfective maintenance
2. regressive maintenance
3. adaptive maintenance
4. corrective maintenance

Correct Answer : 3

755. Compared to small team projects large team projects are

1. more sensitive to programmer ability
2. less sensitive to programmer ability
3. not sensitive to programmer ability
4. None of these

Correct Answer : 2

756. Which of the following is true for two projects of same category with the same estimated LOC size and using COCOMO for estimation A) The initial effort estimate for both projects will be same as both have same LOC B) The Effort Adjustment Factor will always be the same for both projects C) The final effort estimate will always be the same for both projects

1. Only A is true.
2. Only A & B are true
3. Only C is true
4. Neither A, B or C are true.

Correct Answer : 1

757. The critical path of PERT/CPM chart cannot be

1. the path with the longest duration
2. more than one unique path
3. path on which any delays are allowed
4. path with same earliest and latest starts for all activities

Correct Answer : 3

758. What are the components of a thin client model in Client/Server architecture?

1. Client (Presentation) – Server (Data Management, Application Processing)
2. Client (Application Processing) – Server (Data Management)
3. Client (Data Management) – Server (Application Processing)
4. Client (Application Processing) – Server- Client (Data Management)

759. Risks arising out of frequent change requests are best mitigated by

1. User characterization
2. Strong SCM
3. Multisource estimations
4. Prescheduling key personnel

Correct Answer : 2

760. Risk of unrealistic estimates & schedules can be overcome by

1. Using objective methods of estimation rather than judgemental methods
2. Developing a culture of software reuse
3. Performing multisource estimations
4. all of the above

Correct Answer : 4

761. Example of Software Configuration Items (SCI) is

1. SRS
2. Code
3. User manual
4. all of the above

Correct Answer : 4

762. Software quality managers are responsible for ____.



1. Quality assurance
2. Quality planning
3. Quality control
4. All of the above

Correct Answer : 4

:

763. Requirement phase is usually done by

1. System Analyst
2. System Administrator
3. System Engineer
4. All

Correct Answer : 1

764. Iterative method contains the feature of

1. Water fall method
2. Prototype method
3. Both
4. None

Correct Answer : 2

765.. Which of following order is true in software engineering life cycle

1. SRS, Design, Coding, Testing
2. Design, Coding, Testing, SRS
3. SRS, Design, Testing, Coding
4. Coding, Testing SRS, Design

Correct Answer : 1

766. Match the level testing can work on

1) Acceptance Testing 2) System Testing 3) Integration Testing 4) Unit Testing
a) Client Needs b) Requirements c) Design d) Code

1. 1-a, 2-b, 3-c, 4-d
2. 1-d, 2-b, 3-c, 4-a
3. 1-a, 2-b, 3-d, 4-c
4. 1-a, 2-c, 3-b, 4-d

Correct Answer : 1

:

767. Which software development model incorporates risk management?

1. Waterfall model
2. Spiral model
3. Incremental model
4. None of the above

768. Which is the most commonly used debugging approach?

1. Brute force
2. Back tracking
3. Cause elimination
4. None of the above

769. Four important characteristics of a software product are

1. dependability, usability, reliability, robustness



2. maintainability, dependability, efficiency, usability
3. Supportability, maintainability, visibility, rapidity
4. None of the above

770. Enough time will be left at the end of the project to uncover errors that were made because we rushed through the _____ process. The moral is: Don't rush through it! _____ is worth the effort. (Clue: both the blanks to be filled by the same word)

1. coding
2. design
3. testing
4. None of the above

771. Who should perform the validation test?

1. Software developer
2. Software user
3. a group of developers and users
4. None of the above

772. Find the activity, which is not part of version management

1. controlled change
2. storage management
3. coding standard
4. None of the above

773. Testing

1. instills guilt
2. is punishment
3. is to find errors
4. None of the above

774. Which is more important?

1. product
2. process
3. quality
4. None of the above

775. The sooner you begin _____, the longer it will take to get done.

1. coding
2. testing
3. design
4. None of the above

776. Doing what is said one would do, is the definition for

1. reliability
2. quality
3. software plan
4. none of the above

777. Pick up the correct sequence of processes



1. Requirements, Analysis, Test case design, Design
2. Requirements, Analysis, Design, Test case design
3. Requirements, Test case design, Analysis, Design
4. None of the above

778. A software quality assurance activity that is performed by software engineers

1. coding
2. formal technical reviews
3. design
4. None of the above

779. In what manner, coding and testing are done

1. top-down
2. bottom-up
3. cross-sectional
4. adhoc

780. Which of the following is generally not contained in a feasibility document

1. Problem descriptions
2. Project name
3. Feasible alternative solutions
4. data-flow diagrams

781. The initiation of a systems investigation may result from

1. An analysis investigation
2. A manager's formal request
3. Scheduled system review
4. All of the above

782. Which of the following is not a factor in the failure of a systems development Project?

1. inadequate user involvement
2. failure of systems integration
3. size of the company
4. continuation of a project that should have been cancelled

783. "The probability of failure free operation of a computer program in a specified Environment for a specified time" is the definition for

1. quality
2. reliability
3. operability
4. None of the above

784. The four icons used in building Data Flow Diagram are

1. Flow, Source, Store, Process
2. Flow, Process, Source, Store
3. Flow, Process, Source/Destination, Store
4. Source, Process, Destination, Store

785. Which of the following is (are) not a tool for Application Prototyping?

1. Application generates
2. Third generation language
3. Screen generators

4. Report generators

786. All of the following tools are used for process description except

1. Structured English
2. Decision tables
3. Pseudo code
4. Data Dictionaries

787. Which of the following activities does not belong to the Implementation phase of The SDLC?

1. File conversion
2. Program testing
3. User training
4. All of the above

788. Which of the following is not true of the conversion phase of the development life Cycle?

1. the user and systems personnel must work closely together
2. steps must be taken to phase out the old system
3. documentation should be emphasized
4. the non-machine components of the system should be considered

789. Benchmarking is used

1. To select computer systems
2. To maintain files in p-to-date condition
3. for application proto-typing
4. for system acceptance

790. Which is the first phase of the Waterfall software process model?

1. Design
2. Prototype
3. Testing
4. Requirement

791. What is the purpose of use cases in UML?

1. Requirements of capture
2. Define how the software system will be used
3. Describe what the user expects to do with the system
4. Make clear what the stakeholders needs are

792. Please match the Spiral model sectors:

- X1: Objective setting
- X2: Risk assessment and reduction
- X3: Development and validation
- X4: Planning

With their correct characteristics:

- Y1: Risks are assessed and activities put in place to reduce the key risks
- Y2: Specific objectives for the phase are identified
- Y3: The project is reviewed and the next phase of the spiral is planned
- Y4: A development model for the system is chosen which any can be of
The generic models

1. X1-Y3 X2-Y1 X3-Y2 X4-Y4
2. X1-Y2 X2-Y3 X3-Y4 X4-Y1
3. X1-Y2 X2-Y1 X3-Y4 X4-Y3
4. X1-Y3 X2-Y2 X3-Y1 X4-Y4

793. Indicate what information is provided by Functional requirements?

- X1: The constraints on the services or functions offered by the system such as
Timing constraints
- X2: How the system should behave in particular situation
- X3: The constraints on the development process, standards
- X4: How the system should react to particular inputs

1. X2, X4
2. X1, X2, X4
3. X1, X3
4. X2, X3, X4

794. Function point is

1. A pointer to a function
2. A point where the function is written in a code
3. A method of estimating the amount of functionality required for a program
4. A function named "point"

795. A system version

1. Is an instance of a system deployed at the client side?
2. Is an instance of a system that differs in some way from other instances?
3. Should either include new functionalities or should be intended for a different
Hardware platform
4. Is created to fix reported faults as part of development process

796. What is synchronization control in configuration management?

1. It governs which software engineer have the authority to access & modify a
Particular configuration object
2. It helps to ensure that parallel changes performed by two different people don't
Overwrite one another
3. It synchronizes two different system versions to form a single versions
4. It helps to synchronize the source code files to form deployable version

797. The currently known containment effectiveness of faults introduced during each
Constructive phase of software development for a particular software product is
Ratio of

1. (Actual project duration) to (estimated project duration)
2. (number of pre-release Defects) to (number of pre-release Defects) to (number of pre-release
Defects + number of post release Defects)
3. (number of phase i errors) to (number of phase i errors + number of phase i defects)
4. (number of failure) to (Execution time)

798. SRS is maintained in configuration environment as

1. Software design baseline
2. Software development baseline



- 3. Software artefacts
- 4. Software product baseline

799. Following is the SCM audit tool

- 1. Requirement metrics
- 2. PERT charts
- 3. Source Code
- 4. Design Document

800. Delphi method of cost estimation uses

- 1. Functional point analysis
- 2. SLOC expressed in KDSI
- 3. PERT model using effort calculations
- 4. Decomposition method of cost estimation

801. Validate that the functions meet started requirements or not is called as

-
- | | | | |
|-----------------|-------------------|------------------------|-----------------------|
| 1. Unit testing | 2. System testing | 3. Integration Testing | 4. Acceptance Testing |
|-----------------|-------------------|------------------------|-----------------------|

Q.2) what do you mean by incremental testing?

- | | | | |
|----------------------|----------------------|---------------------|------------------------|
| 1. White box testing | 2. Black box testing | 3. Top-down testing | 4. Independent testing |
|----------------------|----------------------|---------------------|------------------------|

802. Verification should be performed for _____

- | | | | |
|-----------------|-----------|----------------------|---------------------|
| 1. Requirements | 2. Design | 3. Code construction | 4. All of the above |
|-----------------|-----------|----------------------|---------------------|

803. Validation is mostly used to determine the _____ of the final software/program.

- | | | | |
|----------------|----------------|-----------------|------------|
| 1. Correctness | 2. Consistency | 3. Completeness | 4. Quality |
|----------------|----------------|-----------------|------------|

804. Quality control procedures are _____

- | | | | |
|---------------------|--------------------|------------------|----------------------|
| 1. Preventive costs | 2. Appraisal costs | 3. Failure costs | 4. None of the above |
|---------------------|--------------------|------------------|----------------------|

805. Who should be involved in determined risk management?

- | | | | |
|-------------|---------------|---------------------|---------------------|
| 1. Customer | 2. Management | 3. Development team | 4. All of the above |
|-------------|---------------|---------------------|---------------------|

806. Which of the following is an attribute of Quality?

- | | | | |
|------------|------------|-------------|-----------|
| 1. Process | 2. Product | 3. Standard | 4. Policy |
|------------|------------|-------------|-----------|

807. The system design SDLC phase is immediately followed by _____

- | | | | |
|-------------------------|---------------|-------------|-----------|
| 1. Program and training | 2. Initiation | 3. Standard | 4. Policy |
|-------------------------|---------------|-------------|-----------|

808. Resource planning, audit planning, estimation, scheduling are the some of the tasks carried out in _____

- | | | | |
|---------------------|------------------------|---------------------|---------------------|
| 1. Initiation phase | 2. System design phase | 3. Definition phase | 4. Evaluation phase |
|---------------------|------------------------|---------------------|---------------------|

809. System reviews and software testing are examples of _____

- | | | | |
|--------------------|----------------------|-------------------|----------------------|
| 1. Quality control | 2. Quality assurance | 3. Quality audits | 4. None of the above |
|--------------------|----------------------|-------------------|----------------------|

810. _____ is done without executing the code.

- | | | | |
|-----------------|---------|-----------|-----------|
| 1. Registration | 2. Unit | 3. System | 4. Static |
|-----------------|---------|-----------|-----------|

811. Which of the following is not a white box testing technique?

- | | |
|--------------------------------|--------------------------------|
| 1. Statement coverage | 2. Equivalence Partitioning |
| 3. Decision/condition coverage | 4. Multiple condition coverage |

812. Which of the following task is not performed by v & v management?

- | | |
|---|---|
| 1. Create the software v & v plan | 2. Conduct the management review of v & v |
| 3. Support management and technical reviews | 4. Conduct in-process reviews |

813. A standard must be _____

- | | |
|--|---------------------------------------|
| 1. Measurable, Attainable and critical | 2. Smart, Measurable and Time-bound |
| 3. Measurable, Achievable and Clear | 4. Approved, Available and Attainable |

814. Which are the four primary standards of ISO 9000?

- | | |
|--|--|
| 1. ISO 9000, ISO 9001, ISO 9004, ISO 10010 | 2. ISO 9000, ISO 9001, ISO 9006, ISO 10011 |
| 3. ISO 9000, ISO 9001, ISO 9004, ISO 10011 | 4. ISO 9000, ISO 9001, ISO 9004, ISO 10054 |

815. Cost of quality includes _____

- | | |
|-------------------------------------|------------------------------------|
| 1. Preventive, Corrective & control | 2. Preventive, detective & control |
| 3. Preventive, appraisal & failure | 4. None of the above |

816. AQL stands for?

- | | |
|-----------------------------|----------------------------|
| 1. Allowable quality level | 2. Allocated quality level |
| 3. Acceptable quality level | 4. Allowed quality level |

817. Quality assurance is a function responsible for _____.

- | | | | |
|------------------------|---------------------|----------------|-----------------------|
| 1. Controlling quality | 2. Managing quality | 3. Inspections | 4. Removal of defects |
|------------------------|---------------------|----------------|-----------------------|

818. _____ is used to perform structured analysis and to document the result.

- | | | | |
|--------|--------|-----------|----------------------|
| 1. DFD | 2. UML | 3. COCOMO | 4. None of the above |
|--------|--------|-----------|----------------------|

819. Reverse engineering of data focuses on _____

- | | | | |
|------------------------|-----------------------------|---------------|----------------------|
| 1. Database structures | 2. Internal data structures | 3. Both 1 & 2 | 4. None of the above |
|------------------------|-----------------------------|---------------|----------------------|

820. System Test will not include _____

- | | | | |
|-------------|----------|---------------------------------------|----------------------|
| 1. Approach | 2. Risks | 3. Suspension and Resumption criteria | 4. None of the above |
|-------------|----------|---------------------------------------|----------------------|

821. As series of definable, repeatable and measurable tasks leading to useful result is called _____

- | | | | |
|------------|------------|-------------|---------------|
| 1. Program | 2. Process | 3. Activity | 4. Controller |
|------------|------------|-------------|---------------|

822. The first step in project planning is to _____

- | | |
|---------------------------------------|---------------------------------------|
| 1. Determine the budget | 2. Determine the project constraints |
| 3. Establish the objectives and scope | 4. Select a team organizational model |

823. Which of the following is a characteristic of a good decision?

- | | |
|--|--|
| 1. Includes test cases for all components | 2. Exhibits strong coupling between its modules |
| 3. Implements all requirements in the analysis model | 4. Incorporates source code for descriptive purposes |

824. Which of the following characteristics of a strong design?

1. Low coupling 2. High cohesion 3. Modular 4. All of the above

825. Find the activity which is not part of version management?

1. Controlled change 2. Storage management
3. Coding standard 4. Creating program code 5. None of the above

826. Which of the following is a disadvantage of outsourcing?

1. Reduces technical know-how for future innovation
2. Increases degree of control
3. Increases vulnerability of strategic information
4. Increases dependency on other organizations

827. If a linear process models all steps come after finishing of a step then that model called _____

1. Spiral 2. Prototype 3. Water fall model 4. None of the above

828. Cyclomatic Complexity method comes under which of the following testing method?

1. White box 2. Black box 3. Green box 4. Yellow box

829. Which of the following provides the foundation for team development?

1. Motivation 2. Organizational development 3. Conflict management
4. Individual development

830. Which of the following is a key to effective software engineering?

1. Good skills 2. Good design 3. Good Management 4. None of the above

831. Estimation for the satisfaction of the identified user needs is known as _____

1. Feasibility study 2. Requirements evolution 3. Requirements capture 4. None of the above

832. Translating the algorithm into a programming language occurs at the _____ step of the SDLC

1. Debugging 2. Coding 3. Testing and Documentation 4. Algorithm Development

833. Who designs and implement database structures?

1. Programmers 2. Project managers 3. Technical writers 4. Database administrators

834. The _____ determines whether the project should go forward or not

1. Feasibility assessment 2. Opportunity identification
3. System evaluation 4. Program specification

835. Actual programming of software code is done during the _____ step in the SDLC

1. Maintenance and Evaluation 2. Design 3. Analysis 4. Development and Documentation

836. Evolutionary software process models _____

1. Are iterative in nature 2. Can easily accommodate product requirements changes
3. Do not generally produce throwaway systems 4. All of the above

837. Which of the following is not a part of testing?



1. White box testing 2. Black box testing 3. Inner testing 4. Gorilla testing

838. Quality assurance _____

1. Focuses on removal of defects before release
2. Is a set of planned and systematic actions to provide confidence that a product or service will satisfy

Given requirements for quality

3. Is to check the system for its interface errors
4. None of the above

839. _____ is the chain of activities that determines the duration of the project

1. object points
2. LOC
3. Lines of code
4. Critical path

840. Debugging is a consequence of _____

1. An unsuccessful test
2. An error in design
3. A successful test
4. A metric that Describes the degree to which a software product meets its requirements

841. In object-orientation, polymorphism means _____

1. There can be many objects in the design
2. Methods can be changed in many ways
3. Many ways can be instantiated of a class
4. Objects can implement the same method in many ways

842. The spiral model of software development _____

1. Ends with the delivery of the software product
2. is more chaotic than the incremental model
3. Includes project risks evaluation during each iteration
4. All of the above

843. The objective of software project planning is to _____

1. Convince the customer that a project is feasible
2. Enable a manager to make reasonable estimates of cost and schedule
3. Make use of historical project data
4. Determine the probable profit margin prior to bidding on a project

844. Which of the following is not a section in the standard for SQA plans recommended by IEEE?

1. Documentation
2. Reviews and audits
3. Test
4. Budget

845. Which of the following tasks is not part of software configuration management?

1. Change control
2. Reporting
3. Statistical quality control
4. Version control

846. How many steps are in the program development life cycle (PDLC)?

1. 4
2. 5
3. 6
4. 10

847. _____ is a measure of independence of a module or component?

1. Cohesion
2. Coupling
3. Loop coupling
4. Loop cohesion

848. The purpose of requirement phase is _____

1. To freeze requirements
2. To understand user needs
3. To define the scope of testing
4. All of the above

849. A modular design has _____

1. High cohesion, low coupling and high abstraction
2. High cohesion, low coupling and low abstraction
3. Low cohesion, low coupling and high abstraction
4. High cohesion, high coupling and high abstraction

850. The outcome of the analysis phase is

- 1. Sufficient understanding of the problem to write a design specification.**
2. Sufficient understanding of the problem to write a formal description of it.
3. Sufficient understanding of the problem to suggest a solution (or solutions)
4. Sufficient understanding of the problem to write a code specification.

851. Corrective maintenance is related to:

1. Making the system more functional
- 2. Correcting the fault that could not be found during testing**
3. Making the system work in new environment
4. All of the above

852. Testing is done with the objective of _____.

- 1. Finding new errors in the software**
2. Correcting errors in the software
3. Both 1 and 2
4. None of the above

853. If a software had 5 failures in 100 tests during 10 days of testing (Assume 10 tests Per day), what would be a good estimate of the reliability of the software over the Next week? (Assume 5 working days in a week)

1. 0.0275
2. 0.5987
3. **0.0769**
4. 0.9500

854. A requirements specification is:

1. A general list of things that the proposed software ought to do
- 2. A precise and mathematical list of things that the proposed software ought to do**
3. A formal list of things that the proposed software must do
4. A list of software and hardware resources needed for completing the proposed system

855. To achieve a good design, different modules should have _____

1. Weak cohesion and low coupling
2. Weak cohesion and high coupling
- 3. Strong cohesion and low coupling**
4. Strong cohesion and high coupling

856. Which of the following is the input to the feasibility study?

1. Outline description of the system
2. Set of preliminary business requirements
3. How the system is intended to support business process
- 4. All of the above**

857. Assuming that the tests are representative of the operational situation, then calculate the Reliability of a software system that has had 10 failures in 200 test cases.

1. **0.95**
2. 0.9
3. 0.1
4. 1

858. A critical task is one with _____

1. Minimum slack time
2. Maximum slack time
- 3. No slack time**
4. None of the above

859. Which of the following is identified as critical for success in software development process?

1. Adopting SDLC configuration management
2. Adopt Continuous risk management
- 3. Both 1 and 2**
4. Choice 2 only

860. Quality control _____

1. Focuses on inspections, testing and removal of defects before release
2. Is to check the system for its interface errors
3. Is checking and reviewing work that has not been done
- 4. Is a set of planned and systematic actions to provide confidence that a product Or service will satisfy given requirements for quality**

861. How maintainability can be achieved?

1. Through Error recovery
- 2. When the S/W process evolves to reflect changed organizational requirements Or identified process improvements**
3. Both 1 and 2
4. None of the above

862. Which testing methods are used by end-users who actually test software before they use it?

1. White Box testing
- 2. Alpha and Beta testing**
3. Black box testing
4. Trial and Error testing

863. What do you mean by nonfunctional requirements?

1. User requirements
2. Requirements definition
- 3. A timing constraint placed on the system or the use of a specific language during Development**
4. None of the above

864. The project plan should be regularly revised during the project

- 1. Yes**
2. No
3. It cannot be changed, it is to be followed
4. It is made only once at the start of project

865. A program's control flow structure indicates _____

1. Correct program
- 2. The sequence in which the program's instructions are executed**
3. High-level language programming
4. All of the above

866. Bar charts and activity networks are graphical notation which are used to illustrate the

1. Project Plan
2. Project dependencies
- 3. Project Schedule**
4. Project Risk Analysis

867. Which factor is not contributing to software crisis?

1. Larger problem sizes
2. Skill shortage
3. Low productivity improvements
- 4. None of the above**

868. Spiral mode _____

1. Is an example of exploratory programming?
- 2. Is characterized by the assessment of management risk items**
3. Both 1 and 2
4. None of the above

869. Cohesion is _____

1. Measure of quality
2. Concept related to testing
3. Understandability
- 4. Measure of closeness of the relationships between the system's components**

870. Which term defines the process of project compliance with policies and procedures?

1. Quality control
2. Quality assurances
3. Quality audits
- 4. Quality control management**

871. The data items that are exchanged between the different functions are represented as _____

1. Design phase
- 2. DFDs**
3. ER Diagram
4. Data Structures

Q.23) which of these terms apply to identify quality standards and how to satisfy them?

1. Quality projections
- 2. Quality management**
3. Quality overview
4. Quality planning

872. Software engineering principles are based on _____

1. Error correction
2. Error prevention
3. Error detection
- 4. None of the above**

873. Acceptance test plan is _____

- 1. Most likely to arise from the requirements specification process**
2. Most likely to arise from the System integration
3. Both 1 and 2
4. None of the above

874. Visibility of design means _____

1. Efficient design
2. Less complex design
3. Good quality, consistent document
- 4. None of above**

875. Project quality management includes _____

- 1. All activities of the performing organization that determines policies and Responsibilities of a project**
2. Performance quality control
3. Error detection
4. None of the above

876. Important distinction between the spiral model and other software process model is

1. Explicit consideration of planning next phase
2. Explicit consideration of Validation
- 3. Explicit consideration of Risk Assessment and Reduction**
4. Explicit consideration of Objective setting

877. Capability maturity model _____

1. Gives description for software process
- 2. States what activities are necessary for success**
3. Describes how activities are to be performed
4. Compare essential difficulties of software

878. Validations is to check _____



1. Whether we are building the product right
product

2. Whether we are building the right

3. The methodology of software development

4. The methodology of software testing

879. Which lifecycle model would you use for developing a commercial web site that requires About 8 months of effort from a team of 6 people?

1. Opportunistic 2. **Waterfall** 3. Incremental 4. Spiral

880. Which of the following s/w development life cycle shows high amount of risk analysis?

1. Water fall model 2. **Spiral model** 3. V-shaped model 4. Incremental model

881. Deliverables are usually milestones but milestones need not be deliverables

1. **True** 2. False 3. May be true 4. None of the above

882. Design phase will usually be _____

1. **bottom-up** 2. Top-down 3. Random 4. Center fringing

883. The execution of every possible test case is called as _____

1. Static analysis 2. Dynamic testing 3. Structural testing 4. **Exhaustive testing**

884. Configuration Management is not related with

1. Controlling changes to the source code
2. **Choice of hardware configuration for an application**
3. Controlling documentation for an application
4. Maintaining versions of software

885. Which of the following statement is correct?

1. The project schedule is usually represented a set of charts showing the work.
2. The project schedule is usually represented as a set of charts showing the activities Dependencies and staff allocations
3. The project schedule is usually represented as a set of charts showing the work Breakdown and activities dependencies
4. **The project schedule is usually represented as a set of charts showing the work Breakdown, activities dependencies and staff allocations**

886. Which is true about regression testing?

1. Regression testing is carried out if the system underline is an upgraded or corrected Version
2. Regression testing checks that there is no side effect after changes
3. **Both 1 and 2**
4. None of the above

887. Which of the following is true about integration testing?

1. Integration testing aims to find out the errors related to various module interfaces
2. Integration testing is a kind of testing, which is carried out while constructing or integrating the System
3. **Integration testing is a kind of testing, which is carried out after constructing or Integrating the system**
4. Both 1 & 2

888. Which of the following is not a queued message?



- a. WM_TIMER
- b. WM_QUIT
- c. WM_COMMAND
- d. None of these

Ans. D

889. Which of the following is not a resource?

- a. Bitmap
- b. Dialog box Template
- c. Html document
- d. None of these

Ans. D

890. Which of the following the resource?

- 1. Bitmap
- 2. Html document
- 3. Dialog templates
- 4. All of the above.

891. Which function is used to compare the regions?

- 1. EqualTo
- 2. EqualRgn
- 3. CompareRgn
- 4. CmpRgn

892. Which of the following is non queued message?

- 1. WM_COMMAND
- 2. WM_QUIT
- 3. WM_TIMER
- 4. All of the above

893. Which function is used to convert white to black and black to white?

- 1. Convert
- 2. Invert
- 3. Insert
- 4. None of above

894. Which API is used to copy and stretch the bitmap?

- 1. Bitblt
- 2. StretchBlt
- 3. Patblt
- 4. None of above

895. Which of the following is a resource?

- 1) Bitmap
- 2) Dialog box template
- 3) Html document
- 4) All of the above**

896. By default polygon is?

- 1) dot-dash
- 2) Solid**
- 3) Transparent
- 4) None of the above



897. _begin thread present in which header file?

- 1)winuser.h
- 2>window.h
- 3)process.h**
- 4)none of the above

898. what function to stretch the bitmap is used?

- 1)strblt()
- 2)bitblt
- 3)stretchblt()**
- 4)hbitmap

899. Which of the following not Virtual key?

- a.VK_PREV
- b.VK_NEXT
- c.VK_UP
- d.None

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- 1.WM_COMMAND
- 2.WM_QUIT
- 3.WM_TIMER
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- 4.None

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- 1)bitmap
- 2)dialod box template
- 3)html document



4)all of the above

905. By default polygon is?

1)dot-dash

2)solid

3)transparent

4)none of the above

906. what function to stretch the bitmap is used?

1)strblt()

2)bitblt

3)stretchblt()

4)hbitmap

907. which of the following is the blocking function?

1)getmessage()

2)postquitmessage()

3)dispatchmessage()

4)translatemessage()

908. The outcome of the analysis phase is

1. Sufficient understanding of the problem to write a design specification
2. Sufficient understanding of the problem to write a formal description of it
3. Sufficient understanding of the problem to suggest a solution (or solutions)
4. Sufficient understanding of the problem to write a code specification

909. A requirements specification is:

1. A general list of things that the proposed software ought to do.
2. A precise and mathematical list of things that the proposed software ought to do.
3. A formal list of things that the proposed software must do.
4. A list of software and hardware resources needed for completing the proposed system.

949. To achieve a good design, different modules should have _____.

1. Weak cohesion and low coupling
2. Weak cohesion and high coupling
- 3. Strong cohesion and low coupling**
4. Strong cohesion and high coupling

950.

What do you mean by nonfunctional requirements?

1. User requirements
2. Requirements definition
- 3. A timing constraint placed on the system or the use of a specific language during development.**
4. None of the above

951. Spiral model _____

1. Is an example of Exploratory programming.



2. Is characterized by the assessment of management risk items.

- 3. Both 1 and 2
- 4. None of the above

952.

Cohesion is _____.

- 1. Measure of quality
- 2. Concept related to testing

3. Understandability

- 4. Measure of closeness of the relationships between the system's components.

953. The data items that are exchanged between the different functions are represented as _

- 1. Design phase

2. DFDs

- 3. ER Diagram
- 4. Data Structures

956. Important distinction between the spiral model and other software process model is

- 1. Explicit consideration of planning next phase
- 2. Explicit consideration of Validation

3. Explicit consideration of Risk Assessment and reduction

- 4. Explicit consideration of Objective setting

957. Which lifecycle model would you use for developing a commercial web site that requires about 8 months of effort from a team of 6 people?

- 1. Opportunistic

2. Waterfall

- 3. Incremental
- 4. Spiral

958. Which of the following software development life cycle shows high amount of risk analysis?

- 1. Water fall model

2. Spiral model

- 3. V – shaped model
- 4. Incremental model

959. Design phase will usually be _____.

- 1. Bottom-up

2. Top-down

- 3. Random
- 4. Centre fringing

960. Which is the first phase of the Waterfall software process model?

- 1. Design



2. Prototype

3. Testing

4. Requirement

961. Indicate what information is provided by Functional requirements?

- X1: The constraints on the services or functions offered by the system such as timing constraints.
- X2: How the system should behave in particular situations.
- X3: The constraints on the development process, standards.
- X4: How the system should react to particular inputs.

1. X2, X4

2. X1, X2, X4

3. X1, X3

4. X2, X3, X4

962. Software engineering principles are based on _____.

1. Error correction

2. Error prevention

3. Error detection

4. None of the above

963. Which of the following are SDLC process models?

1. Waterfall

2. V-shape

3. Spiral

4. All of the above

964. Deployment of a system refers to

1. Activities performed in system testing

2. Implementing the design into executable codes

3. The transition of the system from its development phase to the operational phase.

4. None of the above

965. Please match the Spiral model sectors: (X-Y)

X1: Objective setting

X2: Risk assessment and reduction

X3: Development and validation

X4: Planning with their correct characteristics:

Y1: Risks are assessed and activities put in place to reduce the key risks

Y2: Specific objectives for the phase are identified

Y3: The project is reviewed and the next phase of the spiral is planned

Y4: A development model for the system is chosen which can be any of the generic models

1. X1-Y3, X2-Y1, X3-Y2 X4-Y4

2. X1-Y2, X2-Y3, X3-Y4 X4-Y1

3. X1-Y2, X2-Y1, X3-Y4 X4-Y3

4. X1-Y3, X2-Y2, X3-Y1 X4-Y4



966. The requirement should specify _____

1. Why
2. **What**
3. How
4. All of the above

967. V Shape Model _____

1. Builds the throwaway version intended to test concept & requirements
2. Adds risk analysis, and 4gl RAD prototyping to the waterfall model
3. **Is a variant of the Waterfall that emphasizes the verification and validation**
4. None of the above

968. Just as the entry point to a C program is the function main(), the entry point to a Windows program is _____.

(WinMain())

969. The three main Windows libraries are _____, _____ & _____. (Kernel.32, User32, GDI32)

970.. The size of Unicode character is ____ bits. (32)

971.. CreateWindow() function sends the _____ message. (WM_CREATE)

972.. UpdateWindow() function sends the _____ message. (WM_PAINT)

973. PostQuitMessage() function posts the _____ message. (WM_QUIT)

974. GetMessage() function retrieves a message from the _____. (message queue)

975. GetMessage() returns _____, when it retrieves WM_QUIT message from the message queue. (0)

976. TranslateMessage() function is used for _____ translation. (Keyboard)

977. Window procedure function is a _____ function. (CALLBACK)

978. A program can call its own window procedure by using the _____ function. (SendMessage)

979. DispatchMessage() function passes the MSG structure back to _____. (Windows)

980. The very first message that a window procedure receives is _____. (WM_CREATE)

981. RegisterClass() associates a window procedure to the _____. (window class)



982. Window messages are defined in both windows.h and _____ header files. (winuser.h)

983. Everything that happens to a window is relayed to the _____ in the form of message.
(Window Procedure)

984.. _____ API is used for subclassing. (SetWindowLong())

985. _____ API is used for character translation of keystrokes. (TranslateMessage())

986. Message _____ occurs when the user clicks an item on the menu bar or presses a menu key.
(WM_INITMENU)

963. _____ API is used to kill a modal dialog box. (EndDialog())

964.. _____, _____ and _____ are windows resources defined in a .Res file. (Any three of these -

ICON / CURSOR / STRINGTABLE / DIALOG / MENU / BITMAP)

963. _____ API is used to set the text of an edit control. (SetWindowText())

964. _____ and _____ are GDI objects. (Any two from Brush / Pen / Region / Font / Palette / Bitmap)

965. When there is no message in the queue, PeekMessage() function returns _____. (FALSE or 0)

966.. System keystrokes are generated for keys typed in combination with the ____ key. (Alt)

967. System keystroke messages are _____ and _____. (WM_SYSKEYDOWN, WM_SYSKEYUP)

968. The virtual key code is stored in the _____ parameter of the WM_KEYDOWN message.
(wParam)

969. The repeat count field is stored in the _____ parameter of the keystroke messages. (lParam)

970. _____ function is used for checking the type of information available in clipboard.
(IsClipboardFormatAvailable())

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963. _____ function is used to open the clipboard. (OpenClipboard())
964. _____ function is used to clear the clipboard. (EmptyClipboard())
965. Software acts with a dual role as –
- A. Application software and Embedded software
 - B. Embedded software and Product-line software
 - C. Software product and Environment or application tool for software product development
 - D. Application software and Data storage



Answer: C

966. Which one of the following is false statement?

- A. Software is developed or engineered, it is not manufactured in the classic sense
- B. Replacement of parts is always an ideal solution
- C. Software does not 'wear out' though it may deteriorates over a period
- D. None of the above

Answer: B

967. Software Engineering encompasses -

- A. Process, Methods, and Tools
- B. Process, Product, And Methods
- C. Methods, Tools, and People
- D. People, Process, and Product

Answer: A

968. Which one of the following is correct list of prescriptive process model?

- A. Waterfall, Incremental, Spiral,
- B. Waterfall, V-shaped, Prototyping
- C. Prototyping, Spiral, Adaptive S/w development
- D. Waterfall, Incremental, V-shaped

Answer: D

969. Which process model will you adopt for a project having

- Lengthy delivery schedule
- All requirements are known upfront & well established and
- Customer needs important functionality to be implemented at earliest?

- A. Waterfall
- B. Prototyping
- C. Incremental
- D. RAD

Answer: C

970. Risk analysis and 4gl RAD prototyping is added to the waterfall model to form a ----- model

- A. Spiral
- B. Prototyping
- C. V-shaped
- D. RAD

Answer: A

971.----- model is a variant of the Waterfall model, which also emphasizes the verification and validation

- A. Waterfall
- B. Prototyping
- C. Incremental
- D. V-shaped

Answer: D

972. Requirement should specify

- A. Hardware required to complete the project
- B. Resource requirement
- C. A precise and mathematical list of things that describes what proposed software should provide
- D. Description of how to develop the system

Answer: C

973. Stakeholders are asked to rank / prioritise requirements & discuss conflicts in priority in ----- stage of requirement engineering.

- A. Conflict resolution
- B. Elaboration
- C. Specification
- D. Negotiation

Answer: D

974. Use-cases are defined from ----- point of view

- A. An actor's
- B. A function's
- C. An actor and function's
- D. None of the above

Answer: A

975. Product requirements, Organizational requirements, & External requirements are example of

- A. Domain requirements
- B. Non-functional requirements
- C. Functional requirements
- D. None of the above

Answer: B

976. Which of the following models collectively form the design model?

- A. Data design, Architectural design, Interface Design, Component Design
- B. Data design, Architectural design, System design, Program design
- C. Architectural design, Interface Design, Functional design, Class design
- D. None of the above

Answer: A

977. Cohesion is --

- A. Qualitative indication of the degree to which a module focuses on just one thing
- B. Qualitative indication of the degree to which a module is connected to other modules & to outside world
- C. Both 1 & 2
- D. None of the above

Answer: A

978. Which of the following is FALSE statement?

- A. Abstractions allows designers to focus on solving a problem without being concerned about irrelevant lower level details
- B. Modularity is ability to understand the software by examining its components independently
- C. Control hierarchy represents the procedural aspects of the software
- D. None of the above

Answer: C

979. Coupling is --

- A. Qualitative indication of the degree to which a module focuses on just one thing
- B. Qualitative indication of the degree to which a module is connected to other modules & to outside world
- C. Both 1 & 2
- D. None of the above

Answer: B

980. Validation process checks -

- A. Whether we are building the right product
- B. Whether we are building the product
- C. Whether we are building the product right
- D. Whether we are testing the product

Answer: A

981. Smoke testing is an ----- testing approach, which is used when software is being developed

- A. Unit testing
- B. Regression testing
- C. Integration testing
- D. Acceptance testing



Answer: C

982. ----- is conducted at developer's site by end-users

- A. Beta testing
- B. Alpha testing
- C. White box testing
- D. None of the above

Answer: B

983. Unit testing is

- A. A Black box testing
- B. A White box testing
- C. An User Acceptance Testing
- D. Not a testing

Answer: B

984. ---- provides the maximum number of test cases that will be required to guarantee that every statement in program has been executed at least once.

- A. Independent Program paths
- B. Cyclomatic complexity
- C. Graph Matrices
- D. None of the above

Answer: B

985. Content testing uncovers

- A. Syntactic errors
- B. Semantic errors
- C. Structural errors
- D. All of the above

Answer: D

986. Reliability is indicated by following attributes -

- A. Maturity, fault tolerance, recoverability
- B. Understandability, learnability, accuracy
- C. Suitability, accuracy, compliance
- D. All of the above

Answer: A

987. Consider the following data for the effort spent on various tasks in project

Coding	- 120
Self code walk-thru	- 04
Code review	- 06
Rework (Bug fixing)	- 37
Training	- 02
Tool Development	- 10
Testing	- 35
Preparing check list	- 01

What is the Cost of quality, Failure cost, prevention cost, and appraisal cost?

- A. 120, 35, 37
- B. 37, 95, 120
- C. 95, 37, 13, 45

D. 120, 13, 45

Answer: C

988. Warranty work is an example of -----

- A. Prevention cost
- B. External failure cost
- C. Internal failure cost
- D. All of the above

Answer: B

989. Match the following

- | | |
|--------------------------|--|
| a) Internal failure cost | i) Efforts spent in post-delivery defect fixing |
| b) Appraisal Cost | ii) Efforts spent in pre-delivery defect fixing |
| c) External failure cost | iii) Efforts spent on quality planning, tools development & training |
| d) Prevention cost | iv) Efforts spent on reviews and testing |

- A. a-iv b-iii c-ii d-i
- B. a-iv b-ii c-iii d-i
- C. a-Ib-iii c-ii d-iv
- D. a-ii b-iv c-i d-iii

Answer: D

990. There are --- levels of CMMi

- A. 5
- B. 3
- C. 1
- D. 6

Answer: A

991. The objective of project planning is to provide

- A. Hardware & software requirement
- B. Framework that helps to make reasonable estimates of resources, cost and schedule
- C. Only the list of risks identified
- D. None of the above

Answer: B

992. Pick up the correct statement from following

- A. Project estimates should not be updated during project development
- B. Project estimates should be updated only at the end of the project
- C. Project estimates should be updated as the project progresses
- D. None of the above

Answer: C

993. The purpose of project management is -

- A. Prediction and prevention
- B. Prediction and reaction
- C. Recognition and reaction
- D. None of the above

Answer: A

994. Software project management is ----- within SDLC

- A. A phase
- B. An umbrella activity
- C. A milestone
- D. None of the above

Answer: B

995. Which one of the following is FALSE statement

- A. Gantt charts are often used for displaying the project schedule
- B. Gantt chart shows both planned and actual schedule information
- C. CPM is used for finding total project cost
- D. Critical path is the longest path through the network diagram

Answer: C

996. In Software project management, 4 Ps have to be managed in following order -

- A. Project, People, Product, Process
- B. Process, Problems, People, Product
- C. People, Product, Process, Project
- D. Product, People, Process, Problem

Answer: C

997. A method of estimating the amount of functionality required for a project is

- A. WBS Estimation
- B. UCP Estimation
- C. FP Estimation
- D. COCOMO estimation

Answer: C



998. Scheduling begins with -----

- A. Risk identification
- B. Process decomposition
- C. FP Estimation
- D. COCOMO estimation

Answer: B

999. One of the limitations of FP analysis is

- A. Evaluation effort is small
- B. Facilitates verification
- C. Does not provide phase-wise break up
- D. None of the above

Answer: C

1000. Which one of the following is true

- A. Deliverables are usually milestones but milestones need not be deliverables
- B. All milestones are deliverables
- C. Deliverables & Milestones are always deliverables
- D. None of the above

Answer: A

1001. Risk assessment is done in

- A. Analysis Phase
- B. Design Phase
- C. Coding Phase
- D. All phases of the project

Answer: D

1002. Risk score (or Risk Exposure) is a product of

- A. Probability of occurrence and Impact on project should the risk occur
- B. No. of resources on project and daily per person rate
- C. Probability of occurrence and total No of resources
- D. None of the above

Answer: A

1003. Risk assessment Process involves

- A. Risk identification, Treating problems, Issue resolution
- B. Identify problems, Resolve problems, Report problem
- C. Risk Identification, Assessment & Measurement, Planning, Tracking, Control
- D. None of the above

Answer: C

1004. In Risk management, the purpose of Risk Assessment is



- A. To convert risk data into decision making information
- B. To shift the impact of the threat to a third-party
- C. To reduce probability and impact
- D. To define roles and responsibilities

Answer: A

1005. Does an organization develop one life cycle model?

- a) for all the projects
- b) for each project
- c) for each domain

1006. Pick up the odd one out of the following:

- a) Software Design
- b) Software Testing
- c) Software Quality Assurance

1007. Software requirements should not be

- a) functional
- b) ambiguous
- c) consistent

1008. Find the odd one out of the following:

- a) stepwise refinement
- b) structural design
- c) information hiding

1009. The decision logic is expressed by

- a) data flow diagram
- b) flow chart
- c) structure chart

1010. Validation is to check

- a) whether we are building the product right
- b) whether we are building the right product
- c) the methodology of software development

1011. Corrective maintenance is to

- a) improve the system in some way without changing its functionality
- b) correct the undiscovered errors
- c) make changes in the environment

1012. Which software development model incorporates risk management ?

- a) waterfall model
- b) spiral model
- c) incremental model

1013. Four important characteristics of a software product are

- a) dependability, usability, reliability, robustness
- b) maintainability, dependability, efficiency, usability
- c) Supportability, maintainability, visibility, rapididty



1014. Object models

- a) should include details of the individual objects in the system
- b) are part of design
- c) are natural ways of reflecting the real world entities that are manipulated by the system.

1015. The three classes of interface errors are:

- a) interface misuse, interface misunderstanding, timing errors
- b) interface misunderstanding, interface coupling, data transfer errors
- c) interface coupling, timing errors, interface parameter errors

1016. Which is the non-technical factor of maintenance cost?

- a) program age
- b) programming style
- c) program validation

1017. Software quality assurance is

- a) a multitier testing strategy
- b) a measurement and reporting mechanism
- c) an activity that is applied throughout the software process.

1018. Verification is to check

- a) whether we are building the right product
- b) whether we are building the product right
- c) neither of the above

1019. Most common but least effective way of debugging is

- a) brute force
- b) backtracking
- c) cause elimination

1020. Equivalence partitioning is

- a) a white-box testing method
- b) a black-box testing method
- c) neither white-box nor black-box testing method

1021. The typical elements of the requirements engineering process are

- i) Problem analysis
 - ii) software design
 - iii) Analysis of staffing needs
 - iv) External behavior specification
- A) i and iv
B) ii and iii
C) i, iii and iv
D) i, ii and iii

1022. In object models, information hiding conceals

- A) Operations
- B) Attributes



- C) methods
- D) state and behaviour

1023. Which of the following types of test plans is most likely to arise from the requirements specification process?

- A) system integration test plan
- B) acceptance test plan
- C) sub-system integration test plan
- D) module test plan

1024. In object-orientation, polymorphism means

- A) There can be many objects in the design
- B) Methods can be changed in many ways
- C) Many objects can be instantiated of a class
- D) Objects can implement the same method in many ways.

Fill in the blanks :

1025. The sooner you begin _____ , the longer it will take to get done.

Answers the followings in brief:

- 1026. Explain the concept of black box.
- 1027. What are the qualities of software?
- 1028. Give the various steps in prototyping.
- 1029. What are the various fact-finding Techniques?
- 1030. What are the types of decision tables?
- 1031. What are the structures of Structured English?
- 1032. Give a brief note on acceptance testing.
- 1033. Define coupling and cohesion.
- 1034. What is maintenance? Explain about various types of maintenance.
- 1035. Differentiate between Decision Tree and Decision Table.
- 1036. Give the coding guidelines.
- 1037. Give the debugging approaches.
- 1038. Why Software doesn't wear out.
- 1039. Explain about Dos and Don'ts of good coding style.
- 1040. Give the contents of SRS document.
- 1041. Explain briefly about SEI CMM.
- 1042. What is feasibility study? Explain about various aspects of feasibility.
- 1043. Define normalization and explain about first three normal forms.
- 1044. What is changeover? What are the types of changeover
- 1045. Differentiate between Black Box and White Box testing
- 1046. Explain about Interview as a Fact Finding technique
- 1047. What are the various factors that influence software cost-estimation.
- 1048. Write a short note on Structured charts.
- 1049. Explain about the various concepts of a system.
- 1050. Give Salient features of CASE tools.
- 1051. Explain about various stages of software Development according to classical life cycle.

Answers the followings in detail:

- 1052. Compare and contrast the two life cycle models viz. Waterfall and Spiral models. (Mention at least three distinct aspects).

1053. State the importance of requirements management in a software development
1054. Discuss and compare the coupling and cohesion in software design
1055. Discuss the trade-off between error checking execution time / memory space overhead.
1056. How can the overhead be reduced or eliminated?
1057. Give some reasons for using global variables than parameters. What are the potential problems created by the use of global variables?
1058. Develop test plan for the library management system (List at least three test cases).
1059. Explain why it is very difficult to produce a complete and consistent set of requirements.
1060. Discuss the differences between object-oriented and function-oriented design strategies
1061. Explain why maximising cohesion and minimising coupling leads to more maintainable Systems
1062. Show using a small example, why it is practically impossible to exhaustively test a code.
1063. List at least five distinct tests to exercise the various features of the Powerpoint software used for slide preperation and projection.
1064. State the importance of requirements management in a software development
1065. Develop a high level data flow diagram for an airline reservation system
1066. Discuss the trade-off between error checking execution time / memory space overhead.
1067. How can the overhead be reduced or eliminated?
1068. Give some reasons for using global variables than parameters. What are the potential problems created by the use of global variables?
1069. Develop test plan for the library management system (List at least five test cases).
1070. Rewrite the following requirements so that they may be objectively validated. You may make any reasonable assumptions about the requirements.
- a) The software system should provide acceptable performance under maximum load conditions
 - b) Structured programming should be used for program development
 - c) The software must be developed in such a way that it can be used by inexperienced users.
1071. Model the data processing which might take place in an electronic mail system that can send and receive messages from remote computers.
1072. Discuss the advantages of incremental model as compared to water fall model.
Can a program be correct and still not be reliable ? Explain

1073. Discuss how you would approach the top-down design of a software system.
1074. Discuss the advantages and disadvantages of using the "antibugging" technique to provide built-in debugging assistance to uncover errors.
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1076. Compare and contrast the white-box and black-box testing methods.
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1079. Make a structure chart for the following:
1080. Given an array of integers, arrange them in ascending order using quick sort method.
1081. Develop a software review checklist for use by the designer and the implementor. What issues are important to each of these roles?
1082. Develop a high-level data flow diagram and a structure chart for an airline reservation system.
1083. Develop an architecture and also flow diagrams (up to 2 levels) for the following:
"Consider the automation of the transaction at the registration counter of a post-office. A scanner is provided to capture the "from" and "to" addresses from the envelop. The clerk uses your software to issue receipts to the customers. This is expected to reduce the waiting time at the counter."
1084. Suppose that a 50-KDSI (Thousands of delivered source instructions) application program can be purchased for Rs. 2,000,000/-. Assuming that your in-house programmers cost Rs.30,000/- per programmer month (including overheads), would it be more cost effective to buy the product or to build it ?
1085. A Manager decides to use the reports of code inspections as an input to the staff appraisal process. These reports show who made and who discovered program errors. Is this ethical managerial behaviour? Would it be ethical if the staff were informed in advance that this would happen? What difference might it make to the inspection process?
1086. Apply a "stepwise refinement process" to develop three different levels of procedural abstraction for developing a cheque writer that, given a numeric rupees amount, will print the amount in words that is normally required on a cheque.
1087. Derive a set of test cases for a code which sorts arrays of integers. Draw a flow graph for an algorithm of your choice and derive its cyclomatic complexities
1088. A university intends to procure an integrated student management system holding all details of registered students including personal information, courses taken, and examination marks achieved. The alternative approaches to be adopted are either
a) buy a database management system and develop an in-house system based on this



database.

b) buy a system from another university and modify it to local requirements

c) join a consortium of other universities, establish a common set of requirements and contract a software house to develop a single system for all of the universities in the consortium. Identify two possible risks in each of these strategies.

1089. Consider the error messages produced by MS-DOS or UNIX or WINDOWS operating system. Suggest how they might be improved.

1090. Develop at least two levels of procedural abstraction for implementing the savings bank transactions in a banking system.

1091. Draw a flow graph for the following and find its cyclomatic complexity : Given 1000 numbers, arrange them in ascending order using any one of the sorting methods.

1092. Design test cases for the following problem : Given a quadratic equation, solve it to find the roots.

1093. Oxford College of Commerce is an undergraduate college. The college receives sufficiently large number of application for admission to FY, SY and TY B. Com. classes.

1094. The college has decided to computerize its admission procedure. The standard admission procedure requires adhering to the norms set by concerned government agencies, the university and the college administration. The procedure also involves disbursing admission forms at a cost, collecting duly completed forms, preparing merit lists and admitting the students as per norms, notifying student, collecting fees, preparing and submitting reports to concerned authorities.

By carefully studying the case you are required to solve the following:

- i. Draw a context level and first level DFD
- ii. Identify the various reports required

1095. Draw the context level diagram for a payroll system

1096. Prepare Context diagram for the saving bank deposit and withdrawal system in a nationalized bank. Also draw the first level DFD for the same.

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You are required to identify :

(i) Entities:

Processes

Data flows

Data Stores

1098. Quality control

a) Focuses on inspections, testing and removal of defects before release.

- b) Is a set of planned and systematic actions to provide confidence that a product or service will satisfy given requirements for quality.
- d) is to check the system for its interface errors.

1099. Analysis phase is

- a) not to actually solve the problem
- b) not to determine exactly what must be done to solve the problem
- c) to move quickly to program design

1100. Four important characteristics of a software product are

- a) dependability, usability, reliability, robustness
- b) maintainability, dependability, efficiency, usability
- c) Supportability, maintainability, visibility, rapidity

1101. Object models

- a) should include details of the individual objects in the system
- b) are part of design
- c) are natural ways of reflecting the real world entities that are manipulated by the system.

1102. Equivalence partitioning is

- a) A white-box testing method
- b) A black-box testing method
- c) Neither white-box nor black-box testing method

1103. The typical elements of the requirements engineering process are

- i) Problem analysis
 - ii) Software design
 - iii) Analysis of staffing needs
 - iv) External behavior specification
- A) i and iv
 - B) ii and iii
 - C) i, iii and iv
 - D) i, ii and iii

1104. In object models, information hiding conceals

- A) Operations
- B) Attributes
- C) methods
- D) state and behaviour

1105. Which of the following types of test plans is most likely to arise from the requirements specification process?

- A) system integration test plan
- B) acceptance test plan
- C) sub-system integration test plan
- D) module test plan

Answers the followings in detail:

1106. Explain why maximising cohesion and minimising coupling leads to more maintainable Systems



1107. Show using a small example, why it is practically impossible to exhaustively test a code.
1108. List at least five distinct tests to exercise the various features of the Powerpoint software used for slide preparation and projection.
1109. State the importance of requirements management in a software development
1110. Develop a high level data flow diagram for an airline reservation system
1111. Discuss the trade-off between error checking execution time / memory space overhead. How can the overhead be reduced or eliminated?
1112. Give some reasons for using global variables than parameters. What are the potential problems created by the use of global variables?
1113. Develop test plan for the library management system (List at least five test cases).
1114. Rewrite the following requirements so that they may be objectively validated. You may make any reasonable assumptions about the requirements.
- a) The software system should provide acceptable performance under maximum load conditions
 - b) Structured programming should be used for program development
 - c) The software must be developed in such a way that it can be used by inexperienced users.
1115. Model the data processing which might take place in an electronic mail system that can send and receive messages from remote computers.
1116. Discuss the advantages of incremental model as compared to water fall model. Can a program be correct and still not be reliable ? Explain
1117. Discuss how you would approach the top-down design of a software system.
1118. Discuss the advantages and disadvantages of using the "antibugging" technique to provide built-in debugging assistance to uncover errors.
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You are required to identify :

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Data Stores

(ii) Draw E-R Model of the System

1193. Which SDLC Model is best suited when only part/some of the requirements are known at the beginning

- a. Waterfall Model
- b. Incremental Model
- c. Prototype Model
- d. Spiral Model

1194. _____ is an entity that is external to the system & directly interacts with the system and deriving some benefits from the interaction.

- A. Actor
- B. Use case
- C. Class
- D. Relationship

1195. Review activity of any software is under which kind of Testing?

- A. Black Box Testing
- B. Static Testing
- C. Dynamic Testing
- D. White Box Testing



1196. Equivalence Partitioning is a test case generation technique, for _____ kind of Testing Technique.
- A. Static Testing
 - 8. White Box Testing
 - C. Black Box Testing
 - D. Red Box Testing
1197. In the Project Management Triangle. Which parameter is most important?
- a. Time
 - b. Scope
 - c. Cost
 - d. All of the above are equally important
1198. Quality assurance help for
- a. Process improvement
 - b. Testing
 - c. Removal of defects before release
 - d. All of the above
1199. Refers to the support phase of software development.
- A. Adaption
 - B. Enhancement
 - C. Maintenance
 - D. Actions
1200. Which one of the following is the process of factoring the design module?
- A. Software re-engineering
 - B. Configuration management
 - C. Software maintenance
 - D. Software Refactoring
1201. which of the following process is not part of Project Risk Management?
- A. Risk Identification
 - B. Effort estimation
 - C. Risk Anaiysis
 - D. Risk Response Development
1202. enhances performance & functionality of the software after delivery.
- A. Re-design
 - B. Re-engineering
 - C. Maintenance
 - D. Post checking
1203. Which of the following is not a stage of requirement engineering process?



- A. Feasibility study
- 8. Requirement analysis
- C. Requirement definition
- 0. Implementation

1204. Which of the following are objectives for formal technical reviews?

- a. Allow senior staff members to correct errors
- b. Uncover errors in software work products
- c. Assess programmer productivity
- d. Determining who introduced an error into a program

1205. Which of the following meetings is not part of Scrum?

- A. Product review meeting
- B. Sprint review meeting
- C. Sprint planning meeting
- D. Sprint retrospective meeting

1206. In Scrum, the prioritized work to be done is referred to as

- a. sprint planning
- b. product backlog
- c. sprint retrospective
- d. standup meetings

1207. Software risk impact assessment should focus on consequences affecting

- A. planning.resources. oost& schedule
- B. matketability.oost& personnel
- C. business, technology & process
- D. performance.support, oost& schedule

1208. The process starting with the terminal modules is called_____

- a. Top-down integration
- b. Bottom-up integration
- c. Module integration
- d. None of the above



1209. To check whether we are developing the right product according to the customer requirements or not. This is known as static process .

Validation

- a. Quality Assurance
- b. Verification
- c. Quality Control

1210. A reliable system will be one:

that is unlikely to be completed on schedule

that is unlikely to cause a failure

that is likely to be fault-free

that is likely to be liked by the users

\$3.051'?

1211. To test a function, the programmer has to write a passes it test data.

Stub

Proxy

Driver

None of the above

1212. which calls the function and

90'??

When a new testing tool is purchased.it should be used first by:

A small team to establish the best way to use the tool

Everyone who may eventually have some use for the tool

The independent testing team

The vendor contractor to write the initial scripts

1213. Pick up IEEE the best definition of software engineering?

Set of computer programs. procedures and possibly associated document concerned with the operation of data processing.



Software engineering is Design. Coding. Development

Software engineering implement a single independent function

Software engineering is the establishment and use of sound engineering practice in order to produce economical and reliable software that will perform efficiently on real machine

1214. The identification of stakeholders and user classes in requirements engineering is carried out in

Elicitation

Analysis

Verification

Specification

1215. Which among the following gives a chronological record of relevant details about the execution of tests?

A. Test incident report

B. Test log

C. Test summary report

D. None of the above

1216. What is not included in a System Requirement Specification Document?

Scope

Specific Requirements

Design Solutions

References

1217. Project risk factor is considered in

a. Spiral Model

b. Waterfall Model

c. Prototyping Model

d. Iterative enhancement Model

1218. Formal Reviews of an individual product. used to evaluate correctness. based on its input criteria are .

Inspections

Checkpoint review

Testing

Walkthrough

1219. which of the below listed processes is not part of Project Planning?

Identify Constraints

Identify Algorithms



Identify Risks

Identify Milestones

1220. Which one of the following is false statement?

- A. Software is developed or engineered. it is not manufactured in the classic sense
- B. Replacement of parts is always an ideal solution
- C. Software does not 'wear out' though it may deteriorates over a period
- D. None of the above

1221. which of these is not one of the phase names defined by the Unified Process model for software development?

- Inception phase
- Elaboration phase
- Construction phase
- Validation phase

1222. which of the following is not one of Hookers core principles of software engineering practice?

- All design should be as simple as possible, but no simpler
- A software system exists only to provide value to its users.
- Pareto principle (20% of any product requires 80% of the effort)
- Remember that you produce others will consume

1223. Which of the following is valid reason(s) for collecting customer feedback concerning delivered software?

- a) Allows developers to make changes to the delivered increment
- b) Delivery schedule can be revised to reflect changes
- c) Developers can identify changes to incorporate into next increment
- d) All of the above

1224. Which of the following is not generally considered a player in the software process?

- A. Customers
- B. End-users
- C. Sales people
- D. Project managers